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SUPPLEMENT

TO THE

Ferns of Southern India and British India,

CONTAINING

A REVISED LIST OF ALL THE FERNS OF

INDIA, CEYLON, BIRMAH AND THE MALAY PENINSULA,

AND

Mo. Bot. Garden.

45 PLATES OF HITHERTO UNFIGURED SPECIES,

BY

LIEUT.-COLONEL R. H. BEDDOME,
CONSERVATOR OF FORESTS.

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A REVISED LIST OF ALL THE FERNS FOUND IN INDIA, CEYLON, BIRMAH AND MALAY PENINSULA; WITH REFERENCES TO THE PLATES IN THE "FERNS OF SOUTHERN INDIA," AND "THE FERNS OF BRITISH INDIA," AND DESCRIPTIONS OF SOME NEW SPECIES.

SUB-ORDER GLEICHENIACEÆ.

GENUS 1. GLEICHENIA. Sm.

1. Gleichenia circinata, *Sw.*—Malacca. *Ferns British India, tab.* 177. (semivestita).

2. Gleichenia glauca, *Hook.*—North India and Malacca. *Ferns British India, tab.* 30. (gigantea).

3. Gleichenia Norrisii, *Mett.*—Branches of the frond 1-jugate, oblongo-lanceolate, 2-3 feet long, pinnæ lanceolate, the lower distinctly stalked, spreading 6-9 in. long, cut down to a narrow wing into close entire ligulate blunt segments, upper growing gradually smaller, reflexed, texture rigidly subcoriaceous, both surfaces glabrous, the lower green or glaucous veinlets once forked, sori medial, 12-20 to a segment.—*Kuhn. Lin.* 36, *p.* 165 ; *Syn. Fil., 2nd edit., p.* 449. Malacca. *Ferns British India, tab.* 346.

4. Gleichenia dichotoma, *Willd.*—General. *Ferns Southern India, tab.* 74.

SUB-ORDER POLYPODIACEÆ.

TRIBE I. CYATHEÆ.

GENUS 2. CYATHEA. Sm.

1. Cyathea sinuata, *Hook. and Grev.*—Ceylon. *Ferns Southern India, tab.* 259.

2. Cyathea Brunonis, *Wall.*—Malacca. *Ferns British India, tab.* 87.

3. Cyathea Hookeri, *Thw.*—Ceylon. *Ferns Southern India, tab.* 260.

4. Cyathea spinulosa, *Wall.*—North and South India. *Ferns Southern India, tab.* 57

GENUS 3. AMPHICOSMIA. Gard.

Sori globose dorsal on a vein or veinlet, receptacle elevated, involucre a scale situated on the under side of the sorus, varying in size, shape and texture, often indistinct and often very deciduous, veins pinnate, simple and branched, free—fronds ample pinnate or decompound.

1. Amphicosmia Walkeræ, *Hook.*—Ceylon, *Ferns Southern India, tab.* 271. (Cyathea.)

2. Amphicosmia decipiens, *Scott.*—North India. *Ferns British India, tab.* 311. (Alsophila.)

GENUS 4. ALSOPHILA. Br.

1. Alsophila alternans, *Hook.*—Penang. *Ferns British India, tab.* 236.

2. Alsophila comosa, *Hook.*—Singapore. *Ferns British India, tab.* 84.

3. Alsophila contaminans, *Wall.*—North India. *Ferns British India, tab.* 85 and 86. (Brunoniana.)

4. Alsophila crinita, *Hook.*—South India and Ceylon. *Ferns Southern India, tab.* 59.

5. Alsophila commutata, *Mett.*—Malacca. *Ferns British India, tab.* 235. (squamulata.)

6. Alsophila glabra, *Hook.*—General. *Ferns Southern India, tab.* 60.

7. Alsophila latebrosa, *Wall.*—North and South India. *Ferns Southern India, tab.* 58.

8. Alsophila Oldhami, *Bedd.*—North India. *Ferns Southern India, tab.* 343. (A. Scottiana, *Baker* ; *Syn. Fil,* 460.)

9. Alsophila ornata, *Scott.*—North India. *Ferns British India, tab.* 342.

10. Alsophila Andersoni, *Scott.*—North India. *Ferns British India, tab.* 310.

11. ALSOPHILA ALBO-SETACEA, *Bedd.*—Main rachis purplish muricated and (in age) only slightly scaly, pinnæ long petioled, rachis of pinnæ very scaly, pinnules with the 1-2 lowest segments free, the rest cut down nearly to the rachis, oblong subfalcate slightly crenate, veins all forked from near the base one veinlet often and both very rarely again forked, costas sparingly clothed beneath with long white setaceous hairs, which are also present in a less degree on the costa and costules above, costules beneath furnished with deciduous bullate scales which often have a hyaline setaceous point at the apex (resembling the involucre of Cystoperis fragilis) sori copious.

Nicobar Islands collected by Mr. Kurz. Not figured.

GENUS 5. DIACALPE. BL.

1. DIACALPE ASPIDIOIDES, *Bl.*—Ceylon and North India. *Ferns Southern India, tab.* 257.

GENUS 6. MATONIA. BR.

1. MATONIA PECTINATA, *Br.*—Malacca. *Ferns British India, tab.* 186.

TRIBE II. DICKSONIEÆ.

GENUS 7. STRUTHIOPTERIS, W.

1. STRUTHIOPTERIS ORIENTALIS, *Hook.*—North India. *Ferns British India, tab.* 171.

GENUS 8. WOODSIA. BR.

1. WOODSIA LANOSA, *Hook.*—North India. *Ferns British India, tab.* 341.
2. WOODSIA ELONGATA, *Hook.*—North India. *Ferns British India, tab.* 14.

GENUS 9. PERANEMA. DON.

1. PERANEMA CYATHEOIDES, *Don.*—North and South India. *Ferns Southern India, tab.* 73.

GENUS 10. CIBOTIUM. KAULF.

1. CIBOTIUM BAROMETZ, *Link.*—North India and Malacca. *Ferns British India, tab.* 83. (glaucum.)

GENUS 11. PATANIA. PRESL. (Dennstædtia, *Moore.*)

1. PATANIA SCABRA, *Wall.*—Ceylon, North India and Malacca. *Ferns Southern India, tab.* 258 (Dennstædtia deltoidea.)
2. PATANIA APPENDICULATA, *Wall.*—North India. *Ferns British India, tab.* 82.
3. PATANIA ELWESII, *Baker.*—Frond lanceolate, tripinnatifid, 1-1¼ feet long, rachis stramineous glabrous, pinnæ lanceolate, nearly sessile, 3-4 inches long, ¾-⅞ inches broad, the rachis flattened, pinnules 20-30-jugate, lanceolate sessile, cuncate at base, 1½-2 lines broad, deeply pinnatifid, segments ligulate erecto-patent, many entire parallel, lowest on upper side bifid, texture membraneous, both sides green glabrous, veins solitary in the centre of each segment, sori filling up the tip of the segments, ⅓-¼ line broad. North India.—*Syn. Fil, p.* 54 ; *Ferns British India, tab.* 347.

TRIBE III. HYMENOPHYLLEÆ.

GENUS 12. HYMENOPHYLLUM. LINN.

1. HYMENOPHYLLUM PARVIFOLIUM, *Baker.*—Burmah. *Ferns British India, tab.* 225.
2. HYMENOPHYLLUM TENELLUM, *Kuhn.*—Ceylon, *Ferns Southern India, tab.* 267. (polyanthos) ; (H. emersum, *Baker, Syn. Fil., 1st edit.*)
3. HYMENOPHYLLUM EXSERTUM, *Wall.*—General. *Ferns Southern India, tab.* 9.
4. HYMENOPHYLLUM MICROSORUM, *V.D.B.*—North and South India and Ceylon. *Ferns British India, tab.* 306.
5. HYMENOPHYLLUM FLACCIDUM, *V.D.B.*—North India. *Ferns British India, tab.* 276. (H. Khasyanum, *Baker, Syn. Fil.* p. 464.)

6. HYMENOPHYLLUM POLYANTHOS, *Sw.*—General. *Ferns Southern India, tab.* 280.

7. HYMENOPHYLLUM POLYANTHOS, *Sw.*—var. β. Blumeanum, *Spr.* General: *Ferns Southern India, tab.* 266.

8. HYMENOPHYLLUM BADIUM, *Hk. and Grev.*—North India and Malacca. *Ferns British India, tab.* 282.

9. HYMENOPHYLLUM JAVANICUM, *Spr.*—General. *Ferns Southern India, tab.* 207. (crispatum).

10. HYMENOPHYLLUM CILIATUM, *Sw.*—North India. *Ferns British India, tab.* 305.

11. HYMENOPHYLLUM SIMONSIANUM, *Hk.*—North India. *Ferns British India, tab.* 281.

12. HYMENOPHYLLUM SMITHII, *Hk.*—Malacca. *Ferns British India, tab.* 277.

13. HYMENOPHYLLUM DENTICULATUM, *Sw.*—Birma. *Ferns British India, tab.* 278.

14. HYMENOPHYLLUM NEESII, *Hk.*—General. *Ferns British India, tab.* 279; *Ferns Southern India, tab.* 265; exclusive description (Tunbridgense.)

GENUS 13. TRICHOMANES. SMITH.

1. TRICHOMANES EXIGUUM, *Bedd.*—South India and Ceylon. *Ferns British India, tab.* 275.

2. TRICHOMANES MOTLEYI, *V. den. B.*—Ceylon and Birma. *Ferns British India, tab.* 183. (Henzaiense.)

3. TRICHOMANES NEILGHERRENSE, *Bedd.*—South India and Ceylon. *Ferns Southern India, tab.* 6.

4. TRICHOMANES MUSCOIDES, *Sw.*—North India. *Ferns British India, tab.* 304.

5. TRICHOMANES PARVULUM, *Poir.*—North India and South India. *Ferns British India, tab.* 179.

6. TRICHOMANES PROLIFERUM, *Bl.*—South India, Ceylon. *Ferns Southern India, tab.* 262.

7. TRICHOMANES DIGITATUM, *Sw.*—Ceylon, North India. *Ferns Southern India, tab.* 264. (corticola); (not *Ferns British India, tab.* 301, which is var. of No. 15.)

8. TRICHOMANES NANUM, *V. den. B.*—North and South India and Birma. *Ferns British India, tab.* 286. (Kurzii).

9. TRICHOMANES VIRIDANS, *Kuhn.*—Birma. *Ferns British India, tab.* 302. (pusillum).

10. TRICHOMANES PALLIDUM, *Bl.*—Ceylon. *Ferns Southern India, tab.* 263. (glauco-fuscum).

11. TRICHOMANES INTRAMARGINALE, *Hk. & Grev.*—Ceylon, South India (Malabar plains). *Ferns Southern India, tab.* 208.

12. TRICHOMANES FILICULA, *Bory.*—General. *Ferns British India, tab.* 283.

13. TRICHOMANES FILICULA, var. insigne, *V. den. B.*—North India. *Ferns British India, tab.* 284.

14. TRICHOMANES FILICULA, var. plicatum, *V. den. B.*—North India. *Ferns British India, tab.* 285.

15. TRICHOMANES PYXIDIFERUM, *L.*—General. *Ferns Southern India, tab.* 7. (Filicula); *Ferns British India, tab.* 301: (a small variety).

16. TRICHOMANES PYXIDIFERUM, var. limbatum, *Wall.*—North India. (Khasya) Fronds up to 9-10 inches long by 1½-2 inches broad, flaccid. Trichomanes gracilis, *Moore,* Khasya Hills. *Ferns British India, tab.* 348.

17. TRICHOMANES BIRMANICUM, *Bedd.*—Rhizome thick wiry wide creeping tomentose with numerous rootlets, stipe 1-3 inches long, winged throughout, frond 2-7 inches long, up to 2½ inches broad ovate, rachis winged, pinnæ very compound, very minutely furfuraceous (under the lens) the ultimate segments very narrow, ¼ line broad, a single costa to each ultimate segment, sori copious supra-axillary, much exserted, the mouth truncate. Moulmein (Parish No. 181). This will stand next to brevipes in the Syn. Fil.—Trichomanes Antillarum, *V. den. B.* placed in the Synopsis under radicans, is very near it. *Ferns British India, tab.* 349.

18. TRICHOMANES RADICANS, *Sw.*—North India. *Ferns British India, tab.* 181.

19. TRICHOMANES AURICULATUM, *Bl.*—North India. *Ferns British India, tab.* 182. (dissectum).

20. TRICHOMANES JAVANICUM, *Bl.*—North India and Malacca. *Ferns British India, tab.* 180.

21. TRICHOMANES RIGIDUM, *Sw.*—General. *Ferns Southern India, tab.* 8.

TRIBE IV. DAVALLIEÆ.

GENUS 14. HUMATA. Cav.

1. Humata heterophylla, *Sm.*—Malacca. *Ferns British India, tab.* 100.

2. Humata angustata, *Wall.*—Malacca. *Ferns British India, tab.* 237.

3. Humata pedata, *Sm.*—General. *Ferns South India, tab.* 12. (alpina, *Bl.*, is a smaller more cut variety, but quite runs into pedata).

4. Humata vestita, *Bl.*—Ceylon. *Ferns Southern India, tab.* 253.

GENUS 15. LEUCOSTEGIA. Presl. (Acrophorus, *Moore*):

1. Leucostegia hymenophylla, *Parish.*—Birma. *Ferns British India, tab.* 96.

2. Leucostegia membranulosa, *Wall.*—North India. *Ferns British India, tab.* 98.

3. Leucostegia immersa, *Wall.*—General. *Ferns Southern India, tab.* 11.

4. Leucostegia multidentata, *Wall.*—North India. *Ferns British India, tab.* 313. (pteropus).

5. Leucostegia Assamica, *Bedd.*—North India. *Ferns British India, tab.* 94.

6. Leucostegia pulchra, *Don.*—General. *Ferns Southern India, tab.* 10.

7. Leucostegia pseudo-cystopteris, *Kze.*—North India. *Ferns British India, tab.* 92. (chærophylla in part, *Syn. Fil.*)

8. Leucostegia hymenophylloides, *Bl.*—South India, Ceylon. *Ferns Southern India, tab.* 252. (affinis).

9. Leucostegia nodosa, *Hk.*—North India, Malacca. *Ferns British India, tab.* 93.

10. Leucostegia dareæformis, *Hk.*—North India. *Ferns British India, tab.* 95. (Hookeri); *Ferns British India, tab.* 174: (Polypodium); Leucostegia Clarkei, Polypodium dareæforme of *Syn. Fil.*

11. Leucostegia parvula, *Wall.*—Singapore. *Ferns British India, tab.* 97.

(Leucostegia schizophylla of *Syn. Fil.* is Lindsaya orbiculata). (Odontoloma repens of *Syn. Fil.* is Lindsaya repens).

GENUS 16. PROSAPTIA. Presl.

1. Prosaptia Emersoni, *Hook and Grev.*—South India, Ceylon and Malay Peninsula. *Ferns Southern India, tab.* 20.

2. Prosaptia contigua, *Sw.*—South India and Ceylon. *Ferns Southern India, tab.* 19.

GENUS 17. DAVALLIA. Sm.

1. Davallia triphylla, *Hook.*—Singapore. *Ferns British India, tab.* 105.

2. Davallia solida, *Sw.*—Birma. *Ferns British India, tab.* 104.

3. Davallia elegans, *Sw.*—General. *Ferns Southern India, tab.* 18.

4. Davallia epiphylla, *Bl.*—Rhizome thick fibrillose, stipes 4-6 inches long erect firm, frond 12-15 inches long, 6-9 inches broad, deltoid-lanceolate tripinnatifid, main rachis hardly at all winged, pinnules of the lowest pinnæ lanceolate, $1\frac{1}{2}$ inches long, $\frac{1}{2}$ inch broad, segments narrow mucronate sharply toothed, texture coriaceous, veins not immersed, one or two carried into each tooth, sori small submarginal half cup-shaped with the sharp mucro of the tooth extending beyond them. *Syn. Fil.*, *p.* 96.—Davallia elegans, Var. *β.* pulchra. *Hook. Syn. Fil.*, *p.* 165, *tab.* 43. A.—Malay Peninsula. *Ferns British India, tab.* 350.

5. Davallia divaricata, *Bl.*—North India, Birma. *Ferns British India, tab.* 107. (polyantha).

6. Davallia Griffithiana, *Hk.*—North India, Malay Peninsula. *Ferns British India, tab.* 106.

7. Davallia Lorrainei, *Hance.*—Rhizome thick as a quill, scales linear, subulate nearly black, densely grey-ciliated, stipes 3-4 inches long naked brownish, frond $\frac{1}{2}$-1 foot long deltoid 4-pinnatifid; pinnæ stalked deltoid, lowest largest produced on lower side, their rachises winged to base, pinnules and segments subsessile crowded deltoid much reduced on lower side; final lobes ligulate, $\frac{1}{4}$-$\frac{1}{2}$ line broad, with sorus at base of inner side, texture subcoriaceous, surfaces naked, barren lobes 1-veined, involucre subcylindrical $\frac{1}{2}$ line long.—*Hance Ann. Sc. Nat. Ser.* v. *Vol.* v, *p.* 254; *Syn. Fil.*, *2nd edit.*, *p.* 469. Malay Peninsula. *Ferns British India, tab.* 351.

8. Davallia bullata, *Wall.*—General. *Ferns Southern India, tab.* 17.

9. DAVALLIA SPECIOSA, *Mett.*—Rhizome wide creeping 2 lines thick, scales ferruginous, dense linear-subulate, stipes 3-5 inches long naked, brown stramineous, frond deltoid, 4-pinnatifid, 1-1¼ feet long, rachis winged in upper half, pinnæ lanceolate-deltoid long stalked, lowest largest 3-4 inches broad, pinnules and segments deltoid with rachises winged to base, cuneate-truncate on lower side, final lobes lanceolate-falcate under 1 line broad, with sorus on upper side at base, texture subcoriaceous, surfaces naked, involucre cup-shaped broader than deep, ½ line broad, oblique close to final sinuses.—*Kuhn Linnæa* 36, *p.* 145 ; *Syn. Fil. 2nd edit. p.* 469. Moulmein. *Ferns British India, Pl.* 352. (small fragment only).

GENUS 18. MICROLEPIA. PRESL.

1. MICROLEPIA HOOKERIANA, *Wall.*—North India. *Ferns British India, tab.* 101.

2. MICROLEPIA PINNATA, *Cav.*—South India, Malay Peninsula. *Ferns Southern India, tab.* 14.

3. MICROLEPIA MARGINALIS, *Thunb.*—North India. *Ferns British India, tab.* 102. (scabra).

4. MICROLEPIA STRIGOSA, *Sw.*—General. *Ferns Southern India, tab.* 255.

5. MICROLEPIA PROXIMA, *Bl.*—General. *Ferns Southern India, tab.* 15. (polypodioides.) (This is rhomboidea of Wall).

6. MICROLEPIA HIRTA, *Kaulf.*—General. *Ferns Southern India, tab.* 256.

7. MICROLEPIA SPELUNCÆ, *L.*—Fronds up to 9 feet long, quadripinnate, pinnæ up to 3 feet or more long by 12-14 inches broad, very flaccid, furnished on both sides with a few weak hairs, texture membranaceous, pinnules lanceolate, acuminate, rachis prominently winged, secondary pinnules lanceolate, 6-10 lines long cut down ½ or ¾ towards the costa into oblongo-falcate, blunt segments which are again bluntly lobed, the basal segment on the upper side being somewhat larger than the others, sori one to each segment near the sinus (or often 2 to the larger basal segment) terminal on the lowest veinlet. North India. *Ferns British India, tab.* 353.

This very large flaccid Himalayan species does not grow in Southern India, and I have never found it in, or seen specimens from, Ceylon ; it has been much confounded with the larger forms of proxima, *Bl.*, (rhomboidea, *Wall.*) and it was lumped with that by Sir W. Hooker, under the name of polypodioides, and Baker in the new edition of the Synopsis lumps proxima with strigosa which, I am sure, is a mistake, the specimens from which my figure of speluncæ are taken were gathered by Mr. Clarke at Rishop (3,500 feet) near Darjeeling, I have never seen the species growing, but from its very large size and very flaccid texture, it must, I think, be easily distinguished from hirta, but proxima hirta and speluncæ are all closely allied and the Kew packets of speluncæ certainly contained a mixture of all three.

8. MICROLEPIA UROPHYLLA, *Hook.*—North India. *Ferns British India, tab.* 103.

9. MICROLEPIA MAJUSCULA, *Lowe.*—Ceylon. *Ferns Southern India, tab.* 254. (proxima).

10. MICROLEPIA PLATYPHYLLA, *Don.*—General. *Ferns Southern India, tab.* 13.

GENUS 19. STENOLOMA. FEE.

Involucre forming a compressed suborbicular or cup-shaped pouch, terminal on the segments and open only at the top, fronds various in size, but the ultimate segments always cuneate, growing gradually wider from the base to the apex.

1. STENOLOMA TENUIFOLIA, *Sw.*—General. *Ferns Southern India, tab.* 16. (Davallia).

GENUS 20. CYSTOPTERIS. BERNH.

1. CYSTOPTERIS FRAGILIS, *Bernh.*—North India. *Ferns British India, tab.* 91.

2. CYSTOPTERIS SETOSA, *Bedd.*—North India and Birma. *Ferns British India, tab.* 312, 262. (Lastrea.) (Davallia setosa, *Baker ; Syn. Fil.*)

TRIBE V. LINDSAYEÆ.

GENUS 21. LINDSAYA. DRYAND (LINDSÆA.)

1. LINDSAYA CULTRATA, *Sw.*—General. *Ferns Southern India, tab.* 23. *Ferns British India, tab.* 28. (Lobbiana.)

2. LINDSAYA REPENS, *Thw.*—Ceylon, North India and Malay Peninsula. *Ferns Southern India, tab.* 213. (Odontoloma repens. *Desv. Syn. Fil., p.* 93. Lindsaya pectinata, *Bl. Syn. Fil., p.* 106.)

Baker gives the Nilgiris as a locality, but I have never found this fern in Southern India.

3. LINDSAYA REPENS, var. minor, *Thw.*—Ceylon. *Ferns Southern India, tab.* 214.

4. LINDSAYA SCANDENS, *Hook.*—Malacca. *Ferns British India, tab.* 298.

5. LINDSAYA ORBICULATA, *L.*—North India, Ceylon. *Ferns Southern India, tab.* 216. (flabellulata.)

6. LINDSAYA ORBICULATA, *L.* var. *β.* tenera, *Dry.*—South India, Ceylon, Malay Peninsula. *Ferns Southern India, tab.* 24 (tenera). *Ferns British India, tab.* 174. (Davallia trichomanoides, *Thw.* not *Bl.*) (Davallia schizophylla, *Baker*; *Syn. Fil. 2nd edit.*, 468, an abnormally cut variety.)

7. LINDSAYA LANCEA, *L.*—Ceylon. *Ferns Southern India, tab.* 217. (caudata) (trapeziformis, *Dry.*)

8. LINDSAYA RIGIDA, *J. Sm.*—Malacca. *Ferns British India, tab.* 166.

9. LINDSAYA WALKERÆ, *Hook.*—Ceylon. *Ferns Southern India, tab.* 215.

10. LINDSAYA DIVERGENS, *Wall.*—Malacca. *Ferns British India, tab.* 250.

11. LINDSAYA LANUGINOSA, *Wall.*—Birma. *Ferns British India, tab.* 140.

12. LINDSAYA FINDLAYSONIANA, *Wall.*—South India, North India. *Ferns Southern India, tab.* 206. (heterophylla).

GENUS 22. SCHIZOLOMA. GAUD.

1. SCHIZOLOMA LOBATUM, *Poir.*—General. *Ferns Southern India, tab.* 27. (recurvatum, *Wall.*) (nitens, *Bl.*) (venation incorrect.)

2. SCHIZOLOMA LOBATUM, *Poir.*, var. *β* Malabaricum, *Bedd.*—South India. *Ferns British India, tab.* 268.

3. SCHIZOLOMA DAVALLIOIDES, *Bl.*—Malacca. *Ferns British India, tab.* 141.

4. SCHIZOLOMA CORDATUM, *Gaud.*—Malacca. *Ferns British India, tab.* 299.

5. SCHIZOLOMA GUERINIANUM, *Gaud.*—Malacca. *Ferns British India, tab.* 340.

6. SCHIZOLOMA ENSIFOLIUM, *Sw.*—General. *Ferns Southern India, tab.* 24.

7. SCHIZOLOMA ENSIFOLIUM, var. *β* Griffithianum.—Birma. *Ferns British India, tab.* 29.

8. SCHIZOLOMA HETEROPHYLLUM, *Dry.*—General. *Ferns Southern India, tab.* 26.

TRIBE VI. PTERIDEÆ.

GENUS 23. ADIANTUM. L.

1. ADIANTUM PARISHII, *Hk.*—Birma. *Ferns British India, tab.* 16.

2. ADIANTUM LUNULATUM, *Burm.*—General. *Ferns Southern India, tab.* 1.

3. ADIANTUM LUNULATUM, var. Mettenii, *Kuhn.*—Stipes and rachis winged and not polished, petioles very short and winged otherwise as in lunulatum, *Kuhn Fil. Afr., p.* 65; *Baker Syn. Fil. 2nd edit., p.* 472. A. pteropus, *R. Br.* Travancore hills dense moist forests at no great elevation between Courtallum and Quilon. The Travancore specimens gathered lately by me are not in fructification, they correspond exactly with the African plant in the Kew Herbarium, which is in seed. True lunulatum never affects the dense moist forests, but grows in light dry forest or open places at the foot of the hills, and is deciduous in the dry season which this is not. Mr. Baker considers this only a form of lunulatum, R. Brown and Kuhn have made it a distinct species, to prove which is correct, it would be necessary to get it into cultivation and grow it from spores. *Ferns British India, tab.* 354.

4. ADIANTUM CAUDATUM, *L.*—General. *Ferns Southern India, tab.* 2.

5. ADIANTUM CAUDATUM, var. *β* soboliferum, *Wall.*—Birma. *Ferns British India, tab.* 19.

6. ADIANTUM EDGEWORTHII, *Hook.*—North India.—*Ferns British India, tab.* 17.

7. ADIANTUM CAPILLUS-VENERIS, *L.*—General. *Ferns Southern India, tab.* 4.

8. ADIANTUM ÆTHIOPICUM, *L.*—General. *Ferns Southern India, tab.* 5. *Ferns British India, tab.* 18. (emarginatum.

9. ADIANTUM VENUSTUM, *Don.*—North India. *Ferns British India, tab.* 20.

10. ADIANTUM PEDATUM, *L.*—North India. *Ferns British India, tab.* 167.

11. ADIANTUM HISPIDULUM, *Sw.*—General. *Ferns Southern India, tab.* 3.

12. ADIANTUM FLABELLULATUM, *L.*—North India, Ceylon, Birma. *Ferns Southern India, tab.* 218.

GENUS 24. CHEILANTHES. Sw.

1. Cheilanthes fragrans, *Webb.* and *Bernh.*—North India. *Ferns British India, tab.* 338.

2. Cheilanthes Mysorensis, *Wall.*—South India, Ceylon. *Ferns Southern India, tab.* 190.

3. Cheilanthes fragilis, *Hook.*—Birma. *Ferns British India, tab.* 223. (probably only a form of No. 2.)

4. Cheilanthes varians, *Hook.*—South India, North India, Birma. *Ferns Southern India, tab.* 189.

5. Cheilanthes farinosa, *Kaulf.*—General. *Ferns Southern India, tab.* 191, 192, (bullosa) only a high level form (C. bullosa, *Syn. Fil.*)

6. Cheilanthes farinosa, *Kaulf.*, var. β Dalhousiæ.—General. *Ferns Southern India, tab.* 193. (C. Dalhousiæ. *Syn. Fil.*) [Cheilanthes laxa, *Moore.* (Thwaiitesii, *Mett. Syn. Fil. 2nd edit., p.* 547.)]

Mr. Wall has lately sent me fine specimens of the Ceylon laxa or Thwaitesii and it quite corresponds with one of our South India long flaccid forms of this variety of farinosa.

7. Cheilanthes farinosa, *Kaulf.*, var. γ vestita, *Wall.*—North India. *Ferns British India, tab.* 144. (rufa). (C. rufa, *Syn. Fil., p.* 141) Wallich was right in calling this farinosa var. vestita. I have lately received specimens with fronds of typical farinosa on the same root with rufa.

8. Cheilanthes subvillosa, *Hook.*—North India. *Ferns British India, tab.* 142. (probably only a form of farinosa).

9. Cheilanthes tenuifolia, *Sw.*—General. *Ferns Southern India, tab.* 188.

10. Cheilanthes Szovitzii, *Fisch. and Mey.*—North India. *Ferns British India, tab.* 145.

11. Cheilanthes argentea, *Hook.*—North India, Birma. *Ferns British India, tab.* 143.

12. Cheilanthes argentea, *Hook.*, var. β, chrysophylla, *Hook.*—North India, Birma. Pinnules more nearly equal in numerous opposite pairs, the frond narrower and longer, densely coated with yellow powder on the under side. Not figured.

GENUS 25. ONYCHIUM. Kaulf.

1. Onychium auratum, *Kaulf.*—North India, South India, Birma. *Ferns Southern India, tab.* 30.

2. Onychium Japonicum, *Kze.*—North India. *Ferns British India, tab.* 21. (lucidum).

GENUS 26. CRYPTOGRAMME. R. Br.

1. Cryptogramme crispa, *R. Br.*, var. β Brunoniana, *Wall.*—North India. *Ferns British India, tab.* 164.

GENUS 27. PELLÆA. Link.

Sori intramarginal terminal on the veins at first dot-like or decurrent on the veins but soon running into a line, involucre formed of the more or less changed edge of the frond, quite continuous, sometimes very narrow, veins free.

The species now brought under this genus have appeared in this work under Cheilanthes Allosorus, Pteris and Platyloma, I now follow the Synopsis in bringing them all under this genus, nitidula is more properly a Cheilanthes as it has not a continuous involucre.

Mr. Baker divides the genus into 3 subgenera (genera of some authors), Nos. 1 to 3 come under *Cheiloplecton, Fee.*, distinguished by the texture being herbaceous or only subcoriaceous, the veins being clearly visible and the involucre being broad. Nos. 4 and 5 belong to *Allosorus,* Presl., distinguished by the texture being coriaceous, the veins not perceptible and the involucre broad: Nos. 6 and 7 belong to *Platyloma,* J. Sm., in which the texture is coriaceous, the veins hidden and the involucre so narrow that it is soon hidden by the fruit.

1. Pellæa Stelleri, *Gmel.*—North India. *Ferns British India, tab.* 73. (Allosorus).

2. Pellæa concolor, *Langs and Fisch.*—General. *Ferns Southern India, tab.* 37, (Pteris geraniifolia).

3. Pellæa Tamburii, *Hook.*—Stipe 6-9 inches long erect naked chesnut-brown polished, frond about 6 inches each way deltoid with 3 principal pinnæ, the terminal one cut down nearly to the rachis into several broad opposite lanceolate lobes, of which the upper ones are entire, and the lower ones larger and sinuated, lateral pinnæ with the lobes on the upper side nearly entire, but those on the lower side prolonged and again deeply lobed, the largest entire divisions about 1 inch deep, ½ inch broad at the base, texture subcoriaceous, rachis polished brown like the stipe, under surface thinly coated with white farina, involucre brownish continuous but regularly crenated along the outer edges. *Syn. Fil. 2nd edit., p.* 146; *Hook. Sp. Fil.* 2, *p.* 134, *t.* 129 A. Nepal (Tambur valley) not figured.

4. Pellæa nitidula, *Wall.*—North India. *Ferns British India, tab.* 222. (Cheilanthes).

5. Pellæa Boivini, *Hook.*—South India, Ceylon. *Ferns Southern India, tab.* 36. (Pteris).

6. Pellæa falcata, *Fee.*—General. *Ferns Southern India, tab.* 22. (Platyloma).

7. Pellæa calomelanos, *Link.*—North India. *Ferns British India, tab.* 22. (Pteris).

GENUS 28. PTERIS. L.

1. Pteris longifolia, *L.*—General. *Ferns Southern India, tab.* 33.

2. Pteris cretica, *L.*—General. *Ferns Southern India, tab.* 39.

3. Pteris pellucida, *Presl.*—General. *Ferns Southern India, tab.* 38.

4. Pteris Hookeriana, *Agardh.*—Ceylon. *Ferns Southern India, tab.* 40.

5. Pteris dactylina, *Hook.*—North India. *Ferns British India, tab.* 23.

6. Pteris ensiformis, *Burm.*—South India, North India, Ceylon. *Ferns British India, tab.* 35. (crenata).

7. Pteris heteromorpha, *Fee.*—Birma. *Ferns British India, tab.* 89.

8. Pteris Griffithii, *Hook.*—North India. *Ferns British India, tab.* 24.

9. Pteris semipinnata, *L.*—South India, North India. *Ferns Southern India, tab.* 34.

10. Pteris Dalhousia, *Hook.*—North India, Penang. *Ferns British India, tab.* 191.

11. Pteris quadriaurita, *Retz.*—General. *Ferns Southern India, tab.* 31.

12. Pteris quadriaurita, var. β argentea.—General—not figured.

13. Pteris quadriaurita, var. γ aspericaulis, *Wall.* General—not figured.

14. Pteris quadriaurita, var. δ ludens, *Wall.*—Ceylon and Malabar. *Ferns Southern India, tab.* 41 & 219 (Otaria).

15. Pteris quadriaurita, var. ε setigera,—South India, Burma. *Ferns British India, tab.* 202.

16. Pteris patens, *Hook.*—South India, Ceylon. *Ferns Southern India, tab.* 205. (Campteria patens, *Syn. Fil.*) Not a Campteria, the supposed narrow costal arches are only the wings of the rachis.

17. Pteris longipinnula, *Wall.*—North and South India. *Ferns Southern India, tab.* 43.

18. Pteris excelsa, *Gaud.*—North India. *Ferns British India, tab.* 218.

19. Pteris longipes, *G. Don.*—General. *Ferns Southern India, tab.* 32. (pellucens).

20. Pteris aquilina, *L.*—General. *Ferns Southern India, tab.* 42.

This last species is placed in the Synopsis, Filicum in a separate subgenus, under the name of *Pæsia* on account of its involucre being more or less double.

GENUS 29. CAMPTERIA. Presl.

1. Campteria biaurita, *L.*—General. *Ferns Southern India, tab.* 44.

2. Campteria Anamallayensis, *Bedd.*—South India. *Ferns Southern India, tab.* 45. (not in *Syn. Fil.*)

3. Campteria Wallichiana, *Agardh.*—North India. *Ferns British India, tab.* 25 & 217.

GENUS 29. LITOBROCHIA. Presl.

1. Litobrochia pedata, *L.*—Birma, South India. *Ferns British India, tab.* 26 & 27. (Doryopteris ludens palmata and pedata, *Syn. Fil.*)

2. Litobrochia incisa, *Thunb.*—North India and Ceylon. *Ferns Southern India, tab.* 221. (aurita)

3. Litobrochia marginata, *Bory.*—North and South India, Ceylon. *Ferns Southern India, tab.* 224. (tripartita)

GENUS 30. CERATOPTERIS. Brong.

1. Ceratopteris thalictroides, *Brong.*—General. *Ferns British India, tab.* 75.

GENUS 31. LOMARIA. Willd.

1. Lomaria Patersoni, *Spr.* var. elongata, *Bl.*—General. *Ferns Southern India, tabs.* 28 & 28A. (elongata.)

Mr. Wall has sent me a specimen from Ceylon with both sterile and fertile fronds simple.

GENUS 32. PLAGIOGYRIA. Kunze.

1. Plagiogyria adnata, *Bl.*—North India. *Ferns British India, tab.* 51.

2. Plagiogyria glauca, *Bl.*—North India. *Ferns British India, tab.* 90.

3. Plagiogyria pycnophylla, *Kze.*—North India and Birma. *Ferns British India, tab.* 52.

4. Plagiogyria euphlebia, *Kze.*—North India. *Ferns British India, tab.* 165.

TRIBE VII. BLECHNEÆ.

GENUS 33. BLECHNUM. L.

1. Blechnum nitidum, *Presl.*—North India. *Ferns British India, tab.* 49.

2. Blechnum serrulatum, *Rich.*—Caudex elongated stout ascending, stipes 6-12 inches long strong erect smooth nearly naked, frond oblong acuminate 1-2 feet long, 6-9 inches broad with 12-24 pairs of quite distinct articulated linear oblong pinnæ on each side, the largest of which are 4-5 inches long $\frac{1}{2}$-$\frac{3}{4}$ inch broad narrowed gradually towards the point and downwards to a narrow base the margin finely incised, texture coriaceous, rachis rigid naked, veins very fine and close not conspicuous, fertile pinnæ narrower, sori in a continuous line close to the midrib.—*Syn. Fil., 2nd edit., p.* 186.—B. striatum, *Br. Hook, Sp. Fil.* 3., *p.* 55., *tab.* 159.—North India, (Mishmee) Malacca, *not figured.*

3. Blechnum orientale, *L.*—General. *Ferns Southern India, tab.* 29.

4. Blechnum Findlaysonianum, *Wall.*—Malacca. *Ferns British India, tab.* 249.

GENUS 34. BLECHNIDIUM, Moore.

1. Blechnidium melanopus, *Hk.*—North India. *Ferns British India, tab.* 50.

GENUS 35. WOODWARDIA. Sw.

1. Woodwardia radicans, *Sw.*—North India. *Ferns British India, tab.* 88.

GENUS 36. DOODIA. R. Br.

1. Doodia dives, *Kze.*—Ceylon. *Ferns Southern India, tab.* 222.

TRIBE VIII. ASPLENIEÆ.

GENUS 37. THAMNOPTERIS. Presl.

1. Thamnopteris Nidus, *L.*—North India, Birma. *Ferns British India, tab.* 197.

2. Thamnopteris Nidus, var. phyllitidis, *Don.*—General. *Ferns Southern India, tab.* 123.

3. Thamnopteris Grevillei, *Wall.*—Birma. *Ferns British India, tab.* 66.

4. Thamnopteris Simonsiana, *Hook.*—South India (Hills west of Vizagapatam), North India. *Ferns British India, tab.* 247.

GENUS 38. ASPLENIUM. L.

1. Asplenium ensiforme, *Wall.*—General. *Ferns Southern India, tab.* 125.

2. Asplenium ensiforme, var. stenophyllum, *Bedd.*—North India. *Ferns British India, tab.* 147.

3. Asplenium Griffithianum, *Hk.*—North India. *Ferns British India, tab.* 58.

4. Asplenium alternans, *Wall.*—North India. *Ferns British India, tab.* 59.

5. Asplenium viride, *Huds.*—North India. *Ferns British India, tab.* 64.

6. Asplenium Trichomanes, *L.*—General. *Ferns Southern India, tab.* 147.

7. Asplenium normale, *Don.*—General. *Ferns Southern India, tab.* 133. (multijugum.)

8. Asplenium subavenium, *Hk.*—Penang. *Ferns British India, tab.* 288.

9. Asplenium septentrionale, *Hoffm.*—North India. *Ferns British India, tab.* 60.

10. Asplenium longissimum, *Bl.*—Malacca. *Ferns British India, tab.* 63.

11. Asplenium Wightianum, *Wall.*—General. *Ferns Southern India, tab.* 126. (I cannot distinguish A. vulcanicum, *Bl.* either with reference to Ceylon or Malay specimens.)

12. Asplenium Wightianum, var. β minor, *Bedd.*—Southern India. *Ferns Southern India, tab.* 127.

13. Asplenium tenerum, *Forst.*—Ceylon, Malacca. *Ferns Southern India, tab.* 224. (elongatum.)

14. Asplenium lunulatum, *Sw.*, var. β camptorachis, *Kze.*—General. *Ferns Southern India, tab.* 135. (Brasiliense).

15. Asplenium lunulatum, *Sw.*, var. γ. trapeziforme, *Roxb.*—General. *Ferns Southern India, tab.* 134.

16. Asplenium Zenkerianum, *Kze.*—Southern India, Ceylon. *Ferns Southern India, tab.* 127. (persicifolium).

17. Asplenium hirtum, *Kaulf.*—Birma. *Ferns British India, tab.* 194.

18. Asplenium auritum, *Sw.*—General. *Ferns Southern India, tab.* 137.

19. Asplenium falcatum, *Lam.*—General. *Ferns Southern India, tab.* 143, (caudatum.)

20. Asplenium caudatum, *Forst.*—General. *Ferns Southern India, tab.* 140. (contiguum); (A. contiguum, *Syn. Fil.*, is not distinct from caudatum).

21. Asplenium crinicaule, *Hance.*—South India, North India. *Ferns Southern India, tab.* 141. (falcatum); (A. Hancei, *Baker*; A. Beddomei, *Mett.*)

22. Asplenium macrophyllum, *Sw.*—General. *Ferns Southern India, tab.* 142.

23. Asplenium Gardneri, *Baker.*—Rhizome short creeping, stipes grey 2-6 inches, with a few scattered small scales, fronds lanceolate, $\frac{1}{2}$-1 foot long, 3-5 inches broad often gemmiparous, rachis not winged, pinnæ 8-10 jugate distant ascending lanceolate subpetiolate acute, central 2-3 inches long $\frac{1}{2}$-$\frac{5}{8}$ inch broad toothed square on upper side, cuneate truncate on lower side at base, texture thin but firm supple, surfaces bright green naked, veins erecto-patent, forked, moderately close, sori regular, parallel 5-6 jugate $\frac{1}{4}$-$\frac{1}{2}$ inch long nearer midrib than edge—(A. macrophyllum, *Thw.* not *Sw.*); *Syn. Fil., 2nd edit., p.* 485. Ceylon. *Ferns British India, tab.* 355.

24. Asplenium paradoxum, *Bl.*—Birma, Malacca. *Ferns British India, tab.* 193. (zamioides).

The last 6 species are all very closely allied, falcatum and caudatum are probably only varieties of the same species and the Indian plant I figure as macrophyllum is probably a less divided form of the same and different from the Malay macrophyllum.

25. Asplenium formosum, *Bl.*—South India, Ceylon. *Ferns British India, tab.* 136.

26. Asplenium resectum, *Sw.*—General. *Ferns South India, tab.* 133.

27. Asplenium resectum, *Sw.*, var. β rivale, *Bedd.*—South India. *Ferns British India, tab.* 356.

This grows in beds of rivers and is distinct enough from No. 26 to be kept up as a variety.

28. Asplenium resectum, *Sw.*, var. γ decurrens, *Wall.* (cat. 190).—N. India. *Ferns British India, tab.* 357. (Very delicate and transparent in texture, called var. udum in Bengal).

29. Asplenium resectum, *Sw.*, var. δ delicatulum, *Parish.*—Birma. *Ferns British India, tab.* 358.

30. Asplenium heterocarpum, *Wall.*—General. *Ferns Southern India, tab.* 131.

31. Asplenium planicaule, *Wall.*—General. *Ferns Southern India, tab.* 139.

32. ASPLENIUM LACINIATUM, *Don.*—North India, South India. (Vizagapatam hills and Ganjam). *Ferns Southern India tab.* 145.

33. ASPLENIUM RUTA-MURARIA, *L.*—North India. *Ferns British India, tab.* 61.

34. ASPLENIUM ADIANTUM-NIGRUM, *L.*—North India. *Ferns British India, tab.* 62.

35. ASPLENIUM FURCATUM, *Thunb.*—General. *Ferns Southern India, tab.* 144.

36. ASPLENIUM AFFINE, *Sw.*—Ceylon and Malay Peninsula. *Ferns Southern India, tab.* 226. (spathulinum).

37. ASPLENIUM NITIDUM, *Sw.*—General. *Ferns Southern India, tabs.* 148 & 149.

38. ASPLENIUM LASERPITIIFOLIUM, *Lam.*—North India, Ceylon and Malay Peninsula. (The last 3 are all very closely allied.)

39. ASPLENIUM FONTANUM, *Bernh.*—North India. *Ferns British India, tab.* 146.

40. ASPLENIUM FONTANUM, var. β exiguum, *Bedd.*—South India. *Ferns Southern India tab.* 146.

41. ASPLENIUM VARIANS, *Hook & Grev.*—General. *Ferns Southern India, tab.* 129. (This is probably only a tropical form of lanceolatum, *Huds.*, as Major Henderson has found on the Nilgiris plants of what appear to be quite the European lanceolatum growing with it, so if varians is not included under it, lanceolatum must be added as an Indian species).

42. ASPLENIUM BULBIFERUM, *Forst.*—North India, Penang. *Ferns British India, tab.* 65.

43. ASPLENIUM TENUIFOLIUM, *Don.*—General. *Ferns Southern India, tab.* 130.

44. ASPLENIUM RUTŒFOLIUM, *Kze.*—North India, Ceylon. *Ferns Southern India, tab.* 138. (prolongatum).

45. ASPLENIUM BELANGERI, *Kze.*—Birma. *Ferns British India, tab.* 287. (Baker admits Jussieu's genus Darea as a sub-genus for these 2 last and other species growing beyond our limits. Asplenium Wightianum has occasionally dareoid fronds very like those of flaccida, an Australian species of Darea).

GENUS 39. ATHYRIUM. ROTH.

1. ATHYRIUM SUBTRIANGULARE, *Hk.*—North India. *Ferns British India, tab.* 242.

2. ATHYRIUM ATKINSONI, *Bedd.*—Stipes 6-12 inches long erect straw colored furnished towards the base with a few long narrow pale colored scales, frond 10-12 inches long triangular, 10-12 in-broad at its basal pinnæ, gradually narrowing upwards tri-pinnate with the tertiary pinnæ deeply pinnatifid, pinnæ 7-8 on each side, the lowest much the largest 6 inches long by 3 broad, texture herbaceous naked, secondary pinnæ with the rachis winged, but the pinnules (tertiary pinnæ) often distinctly petioled at least in the lower portion of the pinnæ (more so than shown in figure) pinnatifid $\frac{1}{2}$-$\frac{2}{3}$rds of the way down the segments being more or less crenated, sori one to each segment on the basal vein asplenioid, athyrioid or often almost lastreoid, never double, veins terminating just within the margin.—Sikkim, high level, collected by the late Mr. Atkinson, it will stand in the Synopsis between crenatum and subtriangulare, it differs from crenatum to which I was at first inclined to refer it in its fewer pinnæ and pinnules and in its sori.—*Ferns British India, tab.* 359.

3. ATHYRIUM HOHENACKERIANUM, *Kze.*—South India. *Ferns Southern India, tab.* 150.

4. ATHYRIUM FALCATUM, *Bedd.*—South India, North India. (Athyrium drepanophyllum, *Syn. Fil. 2nd edit., p.* 226.) *Ferns Southern India, tab.* 151.

5. ATHYRIUM THELYPTEROIDES, *Michx.*—North India. *Ferns British India, tab.* 68.

6. ATHYRIUM ALLANTODIOIDES, *Bedd.*—North India. *Ferns British India, tab.* 221.

7. ATHYRIUM MACROCARPUM, *Bl.*—General. *Ferns Southern India, tabs.* 152 & 153. (Lastrea sparsa, var. membranacea, *Arnt., Syn. Fil. 2d edit., p.* 498.

8. ATHYRIUM NIGRIPES, *Bl.*—South India, North India, Ceylon. *Ferns Southern India, tab.* 157. (The South Indian and Himalayan forms are somewhat distinct and perhaps different species, the former only is figured).

9. ATHYRIUM CLARKEI, *Bedd.*—Stipe 3-9 inches long straw-colored naked or with a few scales towards the base, frond linear lanceolate $1\frac{1}{2}$-$2\frac{1}{2}$ feet long by 2-$3\frac{1}{2}$ inches broad gradually acuminated at the apex and narrowed at the base with numerous pinnæ on each side, pinnæ (the lower 3-4 pair dwarfed) sub opposite or alternate, cut down to a winged rachis into numerous pinnules, texture herbaceous, (as in macrocarpum) rachis of the pinnæ channelled above and furnished with a few weak setæ on its raised margins naked below, pinnules 3-4 lines long cut down $\frac{1}{3}$rd to $\frac{1}{2}$ way into oblong somewhat falcate crenated segments, costa and veins of the segments sometimes furnished with a few weak setæ on the upper side, sori numerous, straight, curved, or hippocrepiform, rarely double (diplazioid) involucre persistent.

Sikkim (Kupait) 9,000 feet elevation collected by Mr. Atkinson. A few of the sori are really double their apices being separate, many others that appear so are on closer examination only very narrowly hippocrepiform, the apex bent round and the inner margins lying back to back. *Ferns British India, tab.* 360.

10. ATHYRIUM GYMNOGRAMMOIDES, *Bl.*—Ceylon. *Ferns Southern India, tab.* 156.

11. ATHYRIUM GYMNOGRAMMOIDES, var. β erythrorachis, *Bedd.*—The naked stipe and rachis deeply canaliculate, bright purple, frond deltoid ovate 6-10 inches long, (without the stipe) lower pinnæ 3-4 inches long, the partial rachis channelled and winged on the upper side, pruinose and terete beneath, the pinnules petiolate $\frac{5}{8}$ inch long, auricled at the superior base and somewhat pinnatifid at the inferior base, crenate or subentire above, veins pinnate and forked terminating within the margin ; sori asplenioid (never double) a few more or less curved.

Ceylon about Newera Elya and the higher parts of the Island, *not figured* (included by Baker under Athyrium nigripes).

12. ATHYRIUM FILIX-FÆMINA, *Bernh.*—North India. *Ferns Southern India, tab.* 154.

13. ATHYRIUM OXYPHYLLUM, *Hook.*—North India. *Ferns British India, tab.* 67.

14. ATHYRIUM ASPIDIOIDES, *Schl.*—General. *Ferns Southern India, tab.* 155. (pectinatum),

15. ATHYRIUM BREVISORUM, *Wall.*—North India and Birma. *Ferns British India, tab.* 241.

16. ATHYRIUM FIMBRIATUM, *Hook.*—North India. *Ferns British India, tab.* 295.

17. ATHYRIUM UMBROSUM, *J. Sm.*, var. β australe, *Brack.*—Southern India. *Ferns Southern India, tab.* 158.

18. ATHYRIUM MULTICAUDATUM, *Wall.*—North India. *Ferns British India, tab.* 327. (Jerdoni) ; (umbrosum, var. multicaudatum, *Syn. Fil.*)

19. ATHYRIUM GRIFFITHII, *Baker.*—North India. *Ferns British India, tab.* 328.

20. ATHYRIUM ASSIMILE, *End.*—Ceylon. *Ferns British India, tab.* 294.

I have several species of Athyrium from the Himalayas which neither Mr. Baker nor I could satisfactorily determine, one may be an exceedingly compound and much cut variety of macrocarpum and another a very compound form of oxyphyllum, the genus is a very difficult one, and the limits of the species cannot possibly be determined from dried specimens ; a very careful examination of the living plants at their different elevations and localities being absolutely necessary. Baker has described in his new edition of the Synopsis, p. 498, a very common form of Athyrium macrocarpum as Lastrea sparsa, var. membranacea ; his Athyrium macrocarpum, var. Atkinsoni (Clarke), p. 489, is also an ordinary dwarf form of the plant and not a distinct variety.

GENUS 40. DIPLAZIUM. SW.

1. DIPLAZIUM LANCEUM, *Thunb.*—Ceylon, North India. *Ferns Southern India, tab.* 227.

2. DIPLAZIUM SUBSERRATUM, *Bl.*—Penang. *Ferns British India, tab.* 289

3. DIPLAZIUM ZEYLANICUM, *Hk.*—Ceylon. *Ferns Southern India, tab.* 228.

4. DIPLAZIUM PALLIDUM, *Bl.*—Birma. *Ferns British India, tab.* 196.

5. DIPLAZIUM PORRECTUM, *Wall.*—Birma. *Ferns British India, tab.* 245.

6. DIPLAZIUM PINNATIFIDO-PINNATUM, *Hk.*—Mishmee. *Ferns British India, tab.* 244.

7. DIPLAZIUM BANTAMENSE, *Bl.*—General. (Tinnevelly Hills in South India.) *Ferns British India, tab.* 69. (fraxinifolium.)

8. DIPLAZIUM SYLVATICUM, *Presl.*—General. *Ferns Southern India, tab.* 161.

9. DIPLAZIUM SYLVATICUM, var. β. Prescottianum, *Wall.*—Malacca. *Ferns British India, tab.* 243.

10. DIPLAZIUM LONGIFOLIUM, *Don.*—North India. *Ferns British India, tab.* 247. (lobulosum).

11. DIPLAZIUM TOMENTOSUM, *Hk.*—Birma. *Ferns British India, tab.* 195.

12. DIPLAZIUM JAPONICUM, *Thunb.*—South India and Ceylon. *Ferns British India, tab.* 292. (decussatum, *Wall*).

This includes D. polyrhizon, *Baker ; Syn. Fil.* the caudex is erect or creeping, I have lately found it abundant on the high hills bordering the Jeypore country west of Vizagapatam.

13. Diplazium Thwaitesii, *A. Br.*—Ceylon. *Ferns British India, tab.* 291.

14. Diplazium Schkuhrii, *Hk.*—Ceylon. *Ferns Southern India, tab.* 230.

15. Diplazium lasiopteris, *Mett.*—South India. *Ferns Southern India, tab.* 160.

16. Diplazium speciosum, *Mett.*—South India. (Tinnevelly ghats). Malacca. *Ferns British India, tab.* 290.

17. Diplazium Sorzogonense, *Presl.*—North India. *Ferns British India, tab.* 246.

18. Diplazium Stoliczkæ, *Bedd.*—Stipe and rachis glabrous or subglabrous, fronds 1-1½ feet long by about 10 inches broad pinnate, the lowest pair slightly the largest and only a few of the upper ones gradually diminishing, the lower 2-3 pairs opposite or subopposite, the rest alternate, texture subcoriaceous, pinnæ very shortly petioled 5 inches long 1-1½ inches broad gradually tapering towards the apex, cut down 2-3rd to 5-6th of the way to the rachis into very regular oblongs rounded pinnules which are more than ¼ inch broad and very regularly crenated, main veins slightly wavy, veinlets simple or forked towards their apex or from below their centre all very conspicuous and blackish, sori copious 3-7 to each pinnule, (one of lowest pair generally double) touching the main vein of the pinnule and extending along the veinlet about 2-3rds of the way to the margin. Himalayas (Dr, Jerdon.) This is a very fine species coming nearest to Sorzogonense but with broader pinnules. *Ferns British India, tab.* 361.

19. Diplazium polypodioides, *Mett.*—General. *Ferns British India, tab.* 293.

20. Diplazium asperum, *Bl.*—General. *Ferns Southern India, tab.* 163. (polypodioides); (placed under polypodioides in *Syn. Fil.*)

21. Diplazium decurrens, *Bedd.*—Ceylon. *Ferns Southern India, tab.* 229. (D. maximum, *Syn. Fil.* in part. The packets of maximum in the Kew Herb. are a mixture of decurrens and latifolium.)

22. Diplazium latifolium, *Don.*—General. *Ferns Southern India, tab.* 162. (dilatatum).

GENUS 41. ANISOGONIUM. Presl. (including Callipteris, *Bory*).

1. Anisogonium cordifolium, *Mett.*—Malacca. *Ferns British India, tab.* 231.

2. Anisogonium lineolatum, *Mett.*—Malacca. *Ferns British India, tab.* 330.

3. Anisogonium heterophlebium, *Mett.*—North India. *Ferns British India, tab.* 239.

4. Anisogonium esculentum, *Presl.*—General. *Ferns Southern India, tab.* 164. (Callipteris.)

5. Anisogonium Smithianum, *Baker.*—Ceylon. *Ferns British India, tab.* 332. (Callipteris.)

GENUS 42. HEMIDICTYUM. Presl. (including Ceterach, *Willd.*

1. Hemidictyum ceterach, *L.*—North India. *Ferns British India, tab.* 71. (Ceterach officinarum.)

2. Hemidictyum Finlaysonianum, *Wall.*—North India, Birma. *Ferns British India, tab.* 72.

GENUS 43. ALLANTODIA. Wall.

1. Allantodia Javanica, *Bl.*—North India, Ceylon. *Ferns Southern India, tab.* 159. (Brunoniana.)

GENUS 44. ACTINIOPTERIS. Link.

1. Actiniopteris dichotoma, *Forsk.*—General. *Ferns Southern India, tab.* 124. (radiata.)

TRIBE IX. ASPIDIEÆ.

GENUS 45. DIDYMOCHLÆNA. Desv.

1. Didymochlæna lunulata, *Desv.*—Birma and Malay Peninsula. *Ferns British India, tab.* 15.

GENUS 46. MESOCHLÆNA. R. Br.

1. Mesochlæna polycarpa, *Bl.*—Malay Peninsula. *Ferns British India, tab.* 344 (Javanica)

GENUS 47. POLYSTICHUM. Roth.

1. Polystichum semicordatum, *Sw.*—Birma. *Ferns British India, tab.* 35.

2. Polystichum lonchitis, *Sw.*—North India. *Ferns British India, tab.* 128.

3. Polystichum lachenense, *Hk.*—North India. *Ferns British India, tab.* 32.

4. Polystichum Atkinsoni, *Bedd.*—Root stock scaly, stipes 2-3 inches long thin stramineous and with the rachis furnished with a few chaffy scales, fronds 2-3 inches long by ½ inch broad pinnate throughout, pinnæ ovate the 2 sides subequal spinoso-serrate the superior base often with an auricle, texture coriaceous, sori, generally confined to the upper half of the pinnæ. Sikkim, high level, gathered by the late Mr. Atkinson intermediate between Lachenense and ilicifolium. *Ferns British India, tab.* 362.

5. Polystichum auriculatum, *Sw.*—General. *Ferns Southern India, tab.* 120. (Polypodium harpophyllum, *Zenk*; *Syn. Fil. 2nd edit., p.* 511.

6. Polystichum auriculatum, var. β obliquum, *Don.*—North India. *Ferns British India, tab.* 33. (cæspitosum.)

7. Polystichum auriculatum, var. γ marginatum, *Wall.*—North India. *Ferns British India, tab.* 363.

8. Polystichum auriculatum, var. δ lentum, *Don.* North India. *Ferns British India, tab.* 136. (semibipinnatum.)

9. Polystichum ilicifolium, *Don.*—North India. *Ferns British India, tab.* 31. (stimulans.)

10. Polystichum Thomsoni.—*Hk.*—North India. *Ferns British India, tab.* 126.

11. Polystichum aculeatum, *Sw.*—General. *Ferns Southern India, tab.* 121.

12. Polystichum aculeatum, var. Bangulare, *Willd.*—General. *Ferns Southern India, tab.* 122.

There are many forms of this very variable species in different parts of India that might well be figured, they are however difficult to define and though extreme forms of each supposed variety may look very distinct, they often run more or less one into another and some forms even seem to connect ilicifolium, Thomsoni, and Prescottianum.

13. Polystichum anomalum, *Hk. & Arn.*—Ceylon. *Ferns British India, tab.* 219. only an abnormal form of aculeatum I think.

14. Polystichum Prescottianum, *Hk.*—North India. *Ferns British India, tab.* 34.

15. Polystichum Sikkimense, *Bedd.*—North India. *Ferns British India, tab.* 127.

GENUS 48. CYRTOMIUM. Presl.

1. Cyrtomium caducum, *Wall.*—North India. *Ferns British India, tab.* 45.

2. Cyrtomium falcatum, var. β caryotideum, *Wall.*—General. *Ferns Southern India, tab.* 119.

GENUS 49. ASPIDIUM. Schott. (including Sagenia.)

It is impossible to keep up Sagenia for the species with reniform involucres as some of the species have them sometimes pelate and sometimes reniform, or both mixed on the same frond, the involucres are occasionally entirely absent and sometimes very abnormal in shape.

1. Aspidium polymorphum, *Wall.*—General. *Ferns Southern India, tabs.* 116 and 117. This includes siifolium of the *Syn. Fil., 2nd edit., p.* 299, at least as far as the Courtallum plant is concerned, and I believe that Barteri and repandum are not distinct from this even as varieties.

2. Aspidium Singaporianum, *Wall.*—Singapore. *Ferns British India, tab.* 168.

3. Aspidium Zollingerianum, *Kze.*—Birma. *Ferns British India, tab.* 251.

4. Aspidium subtriphyllum, *Hk.*—North India, Ceylon. *Ferns Southern India, tab.* 242. *Ferns British India, tab.* 48.

5. Aspidium subconfluens, *Bedd.*—Stipe 1-1½ feet long furnished with dark colored linear subulate scales, frond deltoid 10-12 inches each way tripinnatifid, lowest pair of pinnæ largest opposite or subopposite shortly petioled unequal sided with the upper pinnules small falcate subentire, the lower ones much produced lanceolate acuminate the 2-3 basal ones cut about ⅓rd down towards the rachis into falcate lobes; above the lowest pair of pinnæ the rachis is broadly winged and the other pinnæ arise from this wing

and they are all cut about $\frac{1}{3}$rd towards the partial rachis into falcate segments, rachides costa and veins pubescent on the undersides, glabrous on the upper-side, texture moderately firm, veins anastomosing with a few free included veinlets, sori small scattered on the connecting veins but not on the free included veinlets, involucre reniform, athyrioid, hippocrepiform or rarely peltate, persistent.

Himalayas (Captain Henderson), this has much the outline and appearance of Sagenia confluens (F. Mueller), an Australian plant, but the sori are smaller and much more scattered. *Ferns British India, tab.* 364.

6. ASPIDIUM SIMONSII, *Baker.*—Stipe $1\frac{1}{2}$-2 feet naked ebeneous as are the rachides, fronds deltoid bipinnatifid 1-$1\frac{1}{2}$ feet long and broad, pinnæ bijugate below the pinnatifid apex, lanceolate $1\frac{1}{2}$-2 inches broad, lowest stalked with a pair of large lanceolate pinnules at the base, texture membranous, surfaces bright green glabrous, main veins $\frac{1}{4}$-$\frac{1}{2}$ inch apart, areolæ with free included simple or forked veinlets, sori small generally on the connecting veinlets, irregularly 2-4 serial between the main veins, involucre minute fugacious (none present in my specimens)—*Syn. Fil., 2nd edit., p.* 504. East Himalayas. The specimen figured was sent me by Mr. J. Scott labelled "melanocaulon."—*Ferns British India, tab.* 367.

7. ASPIDIUM VASTUM, *Bl.*—North India, Malay Peninsula. *Ferns British India, tab.* 169. alata.)

8. ASPIDIUM SEMIBIPINNATUM, *Hk.*—Penang. *Ferns British India, tab.* 137.

9. ASPIDIUM HETEROCARPUM, *Bedd.*—North India. *Ferns British India, tab.* 47. (heterosorum, *Baker Syn. Fil.*)

10. ASPIDIUM VARIOLOSUM, *Wall.*—North India. *Ferns British India, tabs.* 170 *and* 365.

(365 is the true plant—170 is doubtful being only a fragment and is perhaps referable to cicutarium.)

11. ASPIDIUM DECURRENS, *Presl.*—General. *Ferns Southern India, tab.* 82. (pteropus.)

12. ASPIDIUM DECURRENS, var. β minor.—Ceylon. *Ferns Southern India, tab.* 245. (pteropus-minor.)

13. ASPIDIUM CICUTARIUM, *L.*—General. *Ferns Southern India, tab.* 81. (coadunata ;) (a very variable plant if all the forms included under it in the Kew Herb really belong to it.)

14. ASPIDIUM FUSCIPES, *Wall.*—Root stock thick, the crown densely covered with shining black linear lanceolate subulate scales, stipes 8-12 inches furnished with numerous black scales, frond 8-12 inches long 4-7 inches broad at the base, the fertile often much contracted, subdeltoid pinnate with the pinnules pinnatifid and very shortly petioled, the lower pinnæ the largest and unequal sided, the lower basal pinnule being much produced, the other pinnæ cut about $\frac{1}{3}$ of the way down into blunt falcate lobes, texture herbaceous, rachis and both surfaces more or less pubescent, veins more or less copiously anastomosing except in the lobes where they are forked and free, no free veinlets included in the areoles, sori copious generally terminal on the free veins in the lobes, very large and perfectly covering the lamina when the frond is contracted much smaller when there is no contraction, (as occurs in polymophum) involucre reniform.—Himalayas, Birma. *Ferns British India, tab.* 366.

This is easily distinguished from L. dissecta, *Desv.*, under which it is included in the *Syn. Fil.* by its small size anastomosing venation and the numerous black scales on the stipe.—The plant figured was collected by Mr. Clarke at Cachar, but I have it from various parts of North India, the Birma plant is of softer texture more pubescent and greener in color when dried, and the anastomosis not so copious.

15. ASPIDIUM THWAITESII, *Bedd.*—Ceylon. *Ferns Southern India, tab.* 244 (Sagenia simulans, *Baker*; *Syn. Fil. 2nd edit.* 300.)

16. ASPIDIUM GRIFFITHII, *Baker.*—Birma. *Ferns British India, tab.* 337.

GENUS 50. PLEOCNEMIA. PRESL.

1. PLEOCNEMIA GIGANTEA, *Bl.*—Ceylon. *Ferns Southern India, tab.* 80. (Sagenia.)

2. PLEOCNEMIA MEMBRANACEA, *Hk.*—Ceylon. *Ferns Southern India, tab.* 243. (Sag. gigantea-minor) (Aspidium membranaceum, *Syn. Fil.*) The involucres are sometimes reniform and sometimes peltate.

3. PLEOCNEMIA LEUZEANA, *Hk.*—North India, Birma. *Ferns British India, tab.* 134.

4. PLEOCNEMIA CLARKEI, *Bedd.*—Stipes and rachis slightly pubescent, fronds membranaceous lanceolate about 3 feet long (without stipe) 12-14 inches broad, pinnate with the pinnæ deeply pinnatifid, pinnæ numerous alternate $1\frac{3}{4}$-2 inches in breadth the lower ones reduced in size, (and the lowest often mere auricles on the stipe) pubescent on both sides, but more so beneath, pinnatifid nearly to the rachis, the pinnules lanceolate from a broad base irregular as to length and from subentire to deeply pinnatifid (on the same pinna) acute at the apex, the lowest veins forming arcs along the costa of the pinnæ from which proceed free veinlets, veins of the pinnules pinnate, or once or twice forked the lowest veinlet of a group often anastomosing with the next group, involucre kidney shaped hairy and ciliate.

I have only seen a single specimen of a large frond and portion of the stipe collected by Mr. Clarke at Dikeeling 4,000 feet (Sikkim), the fructification is nearly terminal on the veinlets and chiefly quite at the base of the pinnules but the specimen is probably very poorly in seed.—*Ferns British India, tab.* 368.

(Nos. 1 and 2 of this genus would perhaps be better placed in Aspidium.)

GENUS 51. LASTREA. Presl.

1. Lastrea amabilis, *Bl.*—South India, Ceylon. *Ferns Southern India, tab.* 109.

2. Lastrea aristata, *Sw.*—General. *Ferns Southern India, tab.* 101. *Ferns British India, tab.* 228 (platypus); (includes L. platypus, *Syn. Fil.*)

3. Lastrea aristata, β Hamiltonii, *Spr.*—North India. *Ferns British India, tab.* 369. (speciosa, *Don.*)

4. Lastrea coniifolia, *Wall.*—General. *Ferns British India, tab.* 261.

5. Lastrea fœniculacea, *Hk.*—North India. *Ferns British India, tab.* 36.

The above 5 species are placed in the Synopsis Filicum under Polystichum with which they agree in habit, they have however reniform involucres.

6. Lastrea cuspidata, *Wall.*—North India. *Ferns British India, tab.* 118. (elongata.)

7. Lastrea hirtipes, *Hk.*—General. *Ferns Southern India, tab.* 96.

8, Lasrtea Walkeræ, *Hk.*—Ceylon. *Ferns Southern India, tab.* 234.

9. Lastrea Walkeræ, var. β macrocarpa.—Ceylon. *Ferns Southern India, tab.* 235.

10. Lastrea Walkeræ, var. γ pinnatifida.—Ceylon. *Ferns Southern India, tab.* 235.

11. Lastrea Walkeræ, var. δ bipinnata.—Ceylon. *Ferns Southern India, tab.* 235.

12. Lastrea gracilescens, *Hk.*—North India, South India. (Mudumallay.) *Ferns British India, tab.* 253.

13. Lastrea immersa, *Hk.*—North India, Malay Peninsula. *Ferns British India, tab.* 252.

14. Lastrea calcarata, *Hk.*—General. *Ferns Southern India, tab.* 246.

15. Lastrea calcarata, var. falciloba, *Hk.*—General. *Ferns Southern India, tab.* 105.

16. Lastrea calcarata, var. ciliata, *Wall.*—Chittagong, South India, (Vizagapatam hills.) *Ferns British India, tab.* 308 (sericea, *Scott.*)

17. Lastrea viscosa, *J. Sm.*—Malacca. *Ferns British India, tab.* 334.

18. Lastrea crassifolia, *Hk.*—Birma, Malacca. *Ferns British India, tab.* 199. (nephrodioides.)

19. Lastrea cana, *Wall.*—North India. *Ferns British India, tab.* 307.

20. Lastrea Beddomei, *Baker.*—South India, Ceylon. *Ferns Southern India, tab.* 110. (gracilescens.)

21. Lastrea ochthodos, *Kze.*—General. *Ferns Southern India, tab.* 106.

22. Lastrea tylodes, *Kze.*—General. *Ferns Southern India, tab.* 107.

23. Lastrea Bergiana, *Schlecht.*—Stipe 6-12 inches long, naked or finally villose, frond 1½-2 feet long, 6-10 inches broad pinnate, the lower ones more or less reduced and rather distant, pinnæ 3-5 inches long, ¾ inch broad, cut down ¾th of the way to the rachis into close entire lobes ⅛ inch broad, texture herbaceous, rachis and under side more or less villose, veinlets simple 6-8 on each side, sori medial, involucre reniform fugacious.

Khasya—collected by the late Dr. Jerdon (it is scarcely distinct from L. patens, *Desv.*) *Ferns British India, tab.* 370.

24. Lastrea thelypteris, *Desv.*—General. *Ferns British India, tab.* 44; *Ferns British India, tab.* 254. (Fairbanki.)

25. Lastrea grisea, *Baker.*—South India. *Ferns British India, tab.* 335.

26. Lastrea sagenioides, *Mett.*—Birma. *Ferns British India, tab.* 38. (melanopus); *Ferns British India, tab.* 230. (Polyp. obscurum.)

27. Lastrea syrmatica, *Willd.*—General. *Ferns Southern India, tab.* 108, (spectabilis).

28. LASTREA APICIFLORA, *Hook.*—North India. *Ferns British India, tab.* 40.

29. LASTREA FILIX-MAS, *Rich.*, var. β patentissima.—General. *Ferns Southern India, tab.* 111.

30. LASTREA FILIX-MAS, var. γ Clarkei, *Baker.*—North India. *Ferns British India, tab.* 370. Fronds 1-2 feet long by 3-5 inches broad narrowed gradually from the middle to both ends the lowest ones reduced to mere auricles, pinnæ sessile cut down to the rachis into close truncate entire lobes, surfaces naked, costa scaly. L. Clarkei, *Baker ; Syn. Fil., 2nd edit., p.* 497. Sikkim, Yakla, 10,000 feet. *Ferns British India, tab.* 371.

31. LASTREA FILIX-MAS, var. δ nidus, *Clarke.*—North India. Stipes forming dense circular tufts like birds' nests, the two lower pinnæ somewhat reduced and deflexed, pinnules inciso-crenate. *Syn. Fil. 2nd. edit., p.* 498. (Sikkim) Yakla 12,000 feet elevation. *Ferns British India, tab.* 372.

This and the last are stunted forms growing at a very high elevation and are perhaps too near patentissima to be considered even good varieties.

32. LASTREA FILIX-MAS, var. ε elongata.—General. *Ferns Southern India, tab.* 112-113. *Ferns Southern India, tab.* 114 (odontoloma).

33. LASTREA FILIX-MAS, var. ζ Cochleata, *Wall.*—General. *Ferns Southern India, tab.* 115. Forms at a low elevation, are very distinct and well marked, higher up the mountains there are often forms quite intermediate between cochleata and elongata.

34. LASTREA FILIX-MAS, var. η odontoloma, *Moore.*—North India. *Ferns British India, tab.* 373. I have referred fig. 114 of the Ferns of South India to elongata as it has quite the texture of ordinary filix-mas, the Himalayan plant here figured is true odontoloma and is of quite a membranous texture and has the involucre much fimbriated, and is worthy, I think, to rank a separate species.

35. LASTREA FLACCIDA, *Hook.*—General. *Ferns Southern India, tab.* 250.

36. LASTREA BRUNONIANA, *Hook.*—North India. *Ferns British India, tab.* 37.

37. LASTREA BARBIGERA.—North India. *Ferns British India, tab.* 227 ; *Ferns British India, tab.* 41. (Falconeri) (I refer Falconeri, Syn. Fil., here).

38. LASTREA SPINULOSA, *Desv.*—North India. *Ferns British India, tab.* 336.

39. LASTREA SPARSA, *Don.*—General. *Ferns Southern India, tab.* 103.

40. LASTREA SPARSA, var. β nitidula, *Wall.*—North India. (L. purpurescens, *Don.*) *Ferns Southern India, tab.* 374.

41. LASTREA SPARSA, var. γ obtusissima, *Mett.*—Ceylon. A much less cut large variety with broader shorter blunt oblong or obovate final lobes ¼ inch broad. *Kuhn Linnœa,* 36 ; *Ferns British India, tab.* 375.

42. LASTREA SPARSA, var. δ deltoidea, *Bedd.*—Ceylon. *Ferns Southern India, tab.* 248.

43. LASTREA SPARSA, var. ε minor, *Thw.*—This is a curious little variety. Mr. Wall sends specimens in fructification with fronds only 2½ inches long by ¾ inch broad, simply pinnate, the pinnules slightly pinnatifid with spinulose teeth, another form has the fronds 10 inches long by 2 inches broad, the pinnules pinnate at the base only, where the secondary pinnules are much dwarfed resembling obovate auricles ;—*Syn. Fil. 2nd edit., p.* 498, *C. P.* 3383. Not figured, Ceylon.

(Lastrea sparsa, var. membranacea. *Arnt. M.S.S., Syn. Fil. 2nd edit., p.* 498, is Athyrium macrocarpum).

44. LASTREA GRACILIS, *Moore.*—North India. *Ferns British India, tab.* 198. (L. sparsa, var. gracilis, *Syn. Fil.*)

45. LASTREA PULVINULIFERA, *Bedd.*—North India. *Ferns British India, tab.* 333.

46. LASTREA PULVINULIFERA, var. β Zeylanica, *Bedd.*—This differs from the Himalayan form in the upper and lower basal pinnules of all the pinnæ being much larger than the others, and in wanting the hair-like scales of that plant, all the rachides being furnished with black much adpressed flattish scales, the tertiary pinnules are pinnatifid hence it is subquadri-pinnate instead of only tripinnate or subtripinnate as in my Himalayan specimens, but this latter is only a question, it being a little more compound and not always a distinction to be considered specific. It is probably however a distinct species though closely allied to pulvinulifera.—Lastrea pulvinulifera in part *Syn. Fil. 2nd edit.*, p. 500. Not figured, Ceylon.

47. LASTREA HENDERSONI, *Bedd.*—Stipes 1-1½ feet and with the rachides purple colored and furnished with patent linear subulate purplish scales, frond 1½-2 feet long by 15-16 inches broad, subdeltoid, tripinnate with the tertiary pinnules deeply pinnatifid and their segments again crenated, the crenatures falcate ; lowest pinnæ largest deltoid unequal sided the two lower basal secondary pinnæ being much produced, texture moderately firm, the costa of the pinnules and veins of the segments sparingly furnished with long weak setæ most copious on the upper side, otherwise glabrous, sori medial on the lower veinlet of the segments, involucre reniform. Shillong Hill, Khasya, 6,000 feet elevation, gathered by Captain Henderson. This comes nearest to pulvinulifera. *Ferns British India, tab.* 377.

48. Lastrea undulata, *Thw.*—Ceylon. *Ferns Southern India, tab.* 271. (perhaps a form of sparsa.)

49. Lastrea deparioides, *Moore.*—South India, Ceylon. *Ferns Southern India, tab.* 104.

50. Lastrea Thwaitesii, *Baker.*—Ceylon. *Ferns Southern India, tab.* 246. (concinna).

51. Lastrea Elwesii, *Baker.*—Stipe very short, rachis stramineous slightly downy, frond oblong lanceolate, narrowed from the middle to both ends bipinnatifid 15-18 inches long, 4-5 inches broad, pinnæ sessile ligulate, central 2-2½ inches long 4-5 lines broad, blunt cut down to a broad wing into close entire blunt spreading lobes ⅛th inch broad, a space near the tip subentire, the lower growing gradually shorter much deflexed, texture moderately firm, surfaces naked bright green, veins distant 3-4 jugate, sori small marginal, involucre minute glabrous fugacious. *Syn. Fil. 2nd edit., p.* 497. Sikkim. *Ferns British India, tab.* 376.

52. Lastrea crenata, *Forsk.*—General. *Ferns Southern India, tab.* 95. (eriocarpa) ; (odorata, *Bory*).

53. Lastrea Parishii, *Hook.*—Birma. *Ferns British India, tab.* 43.

54. Lastrea recedens, *Hook.*—South India, Ceylon. *Ferns Southern India, tab.* 98.

55. Lastrea dissecta, *Forst.*—General. *Ferns Southern India, tab.* 102. (membranifolia).

56. Lastrea spendens, *Hook.*—North India, Malacca. *Ferns British India, tab.* 42.

57. Lastrea ferruginea, *Bedd.*—South India. *Ferns Southern India, tab.* 100.

58. Lastrea scabrosa, *Kze.*—South India. *Ferns Southern India, tab.* 169. (Polypod nigrocarpum).

59. Lastrea angustifrons, *Moore.*—North India. *Ferns British India, tab.* 226.

60. Lastrea intermedia, *Bl.*—North India, Ceylon. *Ferns Southern India, tab.* 249. (Blumei).

61. Lastrea obtusiloba, *Baker.*—Ceylon. *Ferns British India, tab.* 296.

62. Lastrea Boryana, *Willd.*—General. *Ferns Southern India, tab.* 97. (divisa).

63. Lastrea setigera, *Bl.*—General. *Ferns Southern India, tab.* 99. (flaccida corrected afterwards to tenericaulis, *Hook.*) (In the *Syn. Fil.* Polyp. ornatum of Wall. is lumped with this).

GENUS 52. NEPHRODIUM, Rich.

1. Nephrodium otaria, *Presl.*—South India. *Ferns Southern India, tab.* 83. (Pleocnemia aristata).

2. Nephrodium unitum, *R. Br.*—General. *Ferns Southern India, tab.* 89. (propinquum).

3. Nephrodium pteroides, *Retz.*—General. *Ferns Southern India, tab.* 90. (terminans).

4. Nephrodium extensum, *Bl.*—General. *Ferns Southern India, tab.* 85.

5. Nephrodium cucullatum, *Bl.*—General. *Ferns Southern India, tab.* 88. (unitum).

6. Nephrodium punctatum, *Parish.*—Birma. *Ferns Southern India, tab.* 131.

7. Nephrodium elatum, *Bojer.*—Rhizome wide creeping, stipe 1 foot grey downy not scaly, rachis downy, frond oblong-lanceolate 3-4 feet long 1½-2 feet broad bipinnatifid, pinnæ sessile, ligulate-acuminate, central 9-15 inches long, 1-1½ inch broad, cut down to a broad wing into close rather falcate blunt lobes 2-2½ lines broad, lowest distant and much reduced, texture moderately firm, surfaces dark green densely downy on ribs and edge, veins 14-16-jugate, sori large medial, involucre minute fugacious. *Bojer, M. S. S. Syn. Fil. 2nd edit., tab.* 502. Himalayas, *Dr. Jerdon* (also in the Mauritius.) *Ferns British India, tab.* 378.

8. Nephrodium hirsutum, *J. Sm.*—Malacca. *Ferns British India, tab.* 46.

9. Nephrodium aridum, *Don.*—North India, Malay Peninsula. *Ferns British India, tab.* 297.

(Nephrodium Hœnkeanum, *Presl.*—Stipe 1-2 feet long strong erect slightly pubescent, frond 3-4 feet long 12-15 inches broad; pinnæ 6-8 inches long ¾ inches broad, cut from ⅓rd to ½ down into acute subfalcate lobes, texture subcoriaceous, rachis and under surface finely pubescent, veinlets 10-12 on a side, sori subterminal. *Baker, Syn. Fil. 2nd edit., p.* 290.—Asp. multilineatum, *Mett. Fil. Ind., p.* 232. (not Wall.) This is recorded from Ceylon in the *Syn. Fil.* but this locality is probably a mistake as it has not been found there by Dr. Thwaites or any of his collectors).

10. Nephrodium glandulosum, *J. Sm.*—North India and Malacca. *Ferns British India, tab.* 132.

11. Nephrodium urophyllum, *Wall.*—General. *Ferns Southern India, tab.* 239. (Goniopteris). *Ferns British India, tab.* 133. (Nep. lineatum).

12. Nephrodium Moulmeinense, *Bedd.*—General. *Ferns British India, tab.* 3. (Goniopteris lineata). *Ferns British India, tab.* 231. (Gon. multilineata). *Ferns British India, tab.* 232. (Gon. Penangiana). (Goniopteris multilineata, *Syn. Fil.*)

13. NEPHRODIUM COSTATUM, *Wall.*—North India. *Ferns British India, tab.* 222. (Goniopteris lineata, *Syn. Fil.*)

14. NEPHRODIUM AMBOINENSE, *Presl.*—North India, Ceylon. Not figured.

15. NEPHRODIUM AMBOINENSE.—var. β minor, *Bedd.*—Ceylon. *Ferns British India, tab.* 201. (extensum-minor).

16. NEPHRODIUM ARBUSCULA, *Desv.*—General. *Ferns Southern India, tab.* 87.

17. NEPHRODIUM PENNIGERUM, *Bl.*—General. *Ferns Southern India, tab.* 86. (abruptum). I also include under this N. abortivum, *J. Sm.* of the *Syn. Fil.*)

18. NEPHRODIUM MOLLE, *Desv.*—General. *Ferns Southern India, tab.* 84. *Ferns British India, tab.* 200. (didymosorum).

19. NEPHRODIUM CRINIPES, *Hook.*—North India, Malacca. *Ferns British India, tab.* 263.

20. NEPHRODIUM FEROX, *Moore.*—North India. *Ferns British India, tab.* 129.

21. NEPHRODIUM TRUNCATUM, *Presl.*—General. *Ferns British India, tab.* 130. (eusorum).

22. NEPHRODIUM BRACHYODON, *Hook.*—stipes tufted 1-2 feet long greyish naked, frond 2-3 feet long 12-18 inches broad cut from $\frac{1}{3}$rd to $\frac{1}{2}$ down with blunt oblong slightly falcate lobes; lower pinnæ not much smaller than the others the lower lobes more or less reduced, texture coriaceous, costa and primary veins slightly hairy beneath otherwise glabrous veinlets 8-15 pair to each lobe, a single veinlet also rises from the costa between each of the lobes and enters the margin at the sinus either quite free or anastomosing with one or rarely with both of the lower veinlets, sori medial on all the veinlets, involucre small. *Hook, Sp. Fil.* iv. 83. *Syn. Fil. 2nd edit., p.* 295. *Ferns British India, tab.* 379.—Malacca. Nearly allied to Lastrea crassifolia, pl. 199 of this work next to which it should finally be placed whether in Lastrea or Nephrodium, I formerly confounded the two together, but I now believe they are distinct although both were represented in each of the packets in the Kew Herbarium.

GENUS 53. NEPHROLEPIS. SCHOTT.

1. NEPHROLEPIS CORDIFOLIA, *L.*—General. *Ferns Southern India, tab.* 92. (tuberosa).

2. NEPHROLEPIS EXALTATA, *Schott.*—General. *Ferns Southern India, tab.* 93.

3. NEPHROLEPIS BISERRATA, *Schott.*—South India. *Ferns Southern India, tab.* 94. (acuta).

4. NEPHROLEPIS RAMOSA, *Beauv.*—Ceylon, Malacca. *Ferns Southern India, tab.* 251. (obliterata).

GENUS 54. OLEANDRA. CAV.

1. OLEANDRA NERIIFORMIS, *Cav.*—North India. *Ferns British India, tab.* 264.

2. OLEANDRA MUSÆFOLIA, *Kze.*—South India, Ceylon. *Ferns Southern India, tab.* 91. (neriiformis).

3. OLEANDRA WALLICHII, *Hook.*—North India. *Ferns British India, tab.* 265.

4. OLEANDRA CUMMINGII, *J. Sm.*—North India, Birma. *Ferns British India, tab.* 135.

TRIBE X. POLYPODIEÆ.

* Desmobryoid Series. Habit and mode of growth of Aspidieæ, *i. e.*, stems continuous with the caudex, and sori always medial on the veins.

GENUS 55. PHEGOPTERIS. PRESL.

Habit of Lastrea, the stems continuous with the caudex, sori medial on the veins, without an involucre as in Polypodium.

1. PHEGOPTERIS ERUBESCENS, *Wall.*—North India, Malacca. *Ferns British India, tab.* 213. (Polypodium).

2. PHEGOPTERIS APPENDICULATA, *Wall.*—North India, Penang. *Ferns British India, tab.* 256. (Polypodium).

3. PHEGOPTERIS AURICULATA, *Wall.*—North India. *Ferns British India, tab.* 203. (Polypodium).

4. PHEGOPTERIS DISTANS, *Don.*—General. *Ferns Southern India, tab.* 168. (Polyp. paludosum). *Ferns British India, tab.* 39. (Lastrea microstegia).

5. PHEGOPTERIS SCOTTII, *Bedd.*—North India. *Ferns British India, tab.* 345. (perhaps an abnormal form of Lastrea hirtipes).

6. PHEGOPTERIS RUFESCENS, *Bl.*—Ceylon. *Ferns Southern India, tab.* 236.

7. PHEGOPTERIS DRYOPTERIS, *L.*—North India. *Ferns British India, tab.* 74.

8. PHEGOPTERIS ORNATA, *Wall.*—General. *Ferns Southern India, tab.* 171. (Lastrea setigera) *in part Syn. Fil.*

9. PHEGOPTERIS PUNCTATA, *Thunb.*—General. *Ferns Southern India, tab.* 270. (rugulosum).

Many supposed species of this genus have already gone into Lastrea, others will probably follow, and it would perhaps be better only to keep the genus up as a subgenus of Lastrea for such species as may be always absolutely exinvolucrate even in their youngest state.

GENUS 56. GONIOPTERIS. PRESL.

1. GONIOPTERIS PROLIFERA, *Presl.*—General. *Ferns Southern India, tab.* 172.

Nephrodioid involucres have been discovered on all the other supposed Indian species when in very young state, and it is probable that this genus will entirely disappear in favor of Nephrodium.

GENUS 57. DICTYOPTERIS. PRESL.

1. DICTYOPTERIS BARBERI, *Hook.*—Malay Peninsula. *Ferns British India, tab.* 322.

2. DICTYOPTERIS TENERIFRONS, *Hook.*—Birma. *Ferns British India, tab.* 4. (This should probably be referred to Aspidium cicutarium).

3. DICTYOPTERIS DIFFORMIS, *Bl.*—South India, Birma and Malacca. *Ferns British India, tab.* 77. (irregularis). *Ferns Southern India, tab.* 118. (Aspidium ?) (D. macrodon, *Reinw.*—a Malacca plant is separated from this in the *Syn. Fil.*).

4. DICTYOPTERIS POLYCARPA, *Mett.*—Stipe ½ foot rubro-stramineous, slightly pilose upwards, frond deltoid bipinnatifid ½-1¼ feet long, pinnæ 6-jugate lowest largest deltoid unequal sided, stalked tripartite central ligulate-acuminate crenate, texture membranous, surfaces glabrous, main veins distinct to edge, areolæ with free included veinlets, sori copiously scattered terminal or compital. *Mett. Kuhn. Linn.* 36-124. *Syn. Fil. 2nd edit., p.* 506. Malacca not figured.

5. DICTYOPTERIS HETEROSORA, *Baker.* Stipe short brown with spreading linear scales, frond oblong spathulate 2-3 feet long simply pinnatifid, the lowest foot only a narrow wing to the rachis, above this 3-4 pairs of distant oblong-lanceolate acuminate pinnæ 1½-2 inches broad at middle, confluent in a narrow wing, the lowest simple or bipartite, texture thin but firm, surfaces glabrous, ribs naked brownish ; main veins distinct to edge 3-4 lines apart with distinct arches between them and copious small areolæ with free included veinlets, sori very abundant small irregular often confluent. *Baker. Syn. Fil. 2nd edit., p.* 506.

Malacca (habit of Aspidium vastum). (This genus will perhaps give way to Aspidium from which it only differs in the apparent want of an involucre) .

* * Eremobryoid series. Stems articulated at the point of junction with the rhizome, sori generally but not always terminal on the veins.

GENUS 58. POLYPODIUM. L.

1. POLYPODIUM PARASITICUM, *Mett.*—South India, Ceylon. *Ferns Southern India, tab.* 165. (includes P. mediale, *Syn. Fil. 2nd edit.*; round and oblong sori often on the same individual).

2. POLYPODIUM SUBEVENOSUM, *Baker.*—Penang. *Ferns British India, tab.* 323.

3. POLYPODIUM WALLII, *Bedd.*—Rhizome creeping scaly furnished with numerous thick black wiry roots, stipes 3-6 lines long scaly and hairy, fronds linear lanceolate with a blunt apex 3 inches long by ½ inch broad thick coriaceous, the veins quite hidden more or less furnished on both sides and on the margin with delicate black hairs, veins thick forked (or simple towards the apex of the frond) sori large round terminal on the superior veinlet and forming a regular row on each side of the fronds about midway between the costa and the margin. Ceylon, Central Provinces, this comes nearest to parasiticum, but is very much larger and of much thicker texture. *Ferns British India, tab.* 380.

4. POLYPODIUM HIRTELLUM, *Bl.*—Ceylon. *Ferns British India, tab.* 172. (lasiosorum). *Ferns British India, tab.* 212.

5. POLYPODIUM ZEYLANICUM, *Mett.*—Ceylon. *Ferns Southern India, tab.* 237.

6. POLYPODIUM SESSILIFOLIUM, *Hook.*—Malacca. *Ferns British India, tab.* 119.

7. Polypodium cornigerum, *Baker.*—Frond tufted subsessile erect ligulate 3-4 inches long 2-2½ lines broad pinnate pinnæ 20-30 jugate, dimnishing in size from middle of frond both ways almost triangular subacute repand on upper edge, texture subcoriaceous surfaces glabrous, veins one to each pinna forked, falling far short of the tip, sorus large round, solitary at fork close to the main rachis. *Syn. Fil. 2nd edit., page* 503. Ceylon. *Ferns British India, tab.* 381.

8. Polypodium cucullatum, *Nees.*—Ceylon, Malay Peninsula, *Ferns Southern India, tab.* 233. (Calymmodon.)

9. Polypodium Khasyanum, *Hook.*—North India. *Ferns British India, tab.* 173.

10. Polypodium trichomanoides, *Sw.*—North India, Malacca. *Ferns British India, tab.* 2.

11. Polypodium subfalcatum, *Bl.*—General. *Ferns Southern India, tab.* 166. (parvulum.) *Ferns British India, tab.* 189. A (but not fig. B.) This includes P. minutum, *Syn. Fil. 2nd edit., p.* 328, as far at least as the Ceylon plant is concerned.)

12. Polypodium glandulosum, *Hook.*—Ceylon. *Ferns Southern India, tab.* 238. B.

13. Polypodium repandulum, *Mett.*—Ceylon. *Ferns British India, tab.* 189. B.

14. Polypodium Thwaitesii, *Bedd.*—Ceylon. *Ferns British India, tab.* 188.

15. Polypodium obliquatum, *Bl.*—General. *Ferns Southern India, tab.* 167.

16. Polypodium fuscatum. *Bl.*—Ceylon. *Ferns British India, tab.* 324.

17. Polypodium decorum, *Brack.*—South India, Ceylon. *Ferns Southern India, tab.* 238. A.

18. Polypodium subdigitatum, *Bl.*—North India, Malay Peninsula. *Ferns British India, tab.* 229. (probably a Leucostegia), (Polypodium dareæforme, *Hook, Syn. Fil., p.* 339, is Leucostegia dareæformis.)

GENUS 59. GONIOPHLEBIUM. Bl.

1. Goniophlebium amænum, *Wall.*—North India. *Ferns British India, tab.* 5.

2. Goniophlebium lachnopus, *Wall.*—North India. *Ferns British India, tab.* 163.

3. Goniophlebium erythrocarpum, *Mett.*—Rhizome ½ line thick glaucous firm wide creeping, scales lanceolate dark-castaneous minute, stipe 3-4 inches naked stramineous very slender, frond oblong-deltoid 3-4 inches long, 1½-2 inches broad, caudate simply pinnate, pinnæ 5-6 jugate, ligulate blunt 3-4 lines broad, obscurely repand, adnate, only the lowest narrowed at the base on the lower side scarcely shortened, texture rigidly subcoriaceous, rachis and costas below pilose, veins raised very distinct to the edge, areolæ and sori uniserial, the latter near the midrib not crowded—*Kuhn. Linn.* 36, *p.* 135; *Syn. Fil., 2nd edit., p.* 511.—North India, (Sikkim) 8-11000 feet. *Ferns British India, tab.* 382.

4. Goniophlebium Hendersoni, *Atkinson M. S.*—Rhizome very slender, wide-creeping, stipes 3-4 inches naked very slender grey-stramineous, frond lanceolate 8-9 inches long, 1½-2 inches broad, simply pinnate, pinnæ 20-30 ligulate bluntish patent 2-3 lines broad, closely inciso-crenate, only the lowest slightly narrowed at base not reduced, texture membranous, surfaces naked light-green, areolæ and sori uniserial, the latter crowded close to the midrib—*Syn. Fil., 2nd edit, p.* 511. North India, (Sikkim) 10-11000 feet. *Ferns British India, tab.* 383.

5. Goniophlebium microrhizoma, *Clarke.*—Rhizome 1 line thick firm wide-creeping, scales minute lanceolate, stipes 4-5 inches, naked like the rachis, castaneous on the lower side, frond lanceolate ¾-1 foot long, 3-4 inches broad, simply pinnate; pinnæ 20-30 jugate, patent lanceolate acute 3-4 lines broad, distantly incised, all except the lowest dilated at the base texture moderately firm, surfaces green naked, areolæ and sori uniserial, the latter near the midrib not crowded. *Syn. Fil., 2nd edit., p.* 511. Sikkim temperate region. *Ferns British India, tab.* 383.

6. Goniophlebium persicæfolium, *Desv.*—Malacca. *Ferns British India, tab.* 79 (cuspidatum.)

7. Goniophlebium molle, *Bedd.*—Birma. *Ferns British India, tab.* 206. (puberulum, *Syn. Fil., 1st edit.* Beddomei, *Syn. Fil., 2nd edit.*)

8. Goniophlebium subauriculatum, *Bl.*—North India, Malacca. *Ferns British India, tab.* 78.

9. Goniophlebium argutum, *Wall.*—North India. *Ferns British India, tab.* 6.

10. Goniophlebium verrucosum, *Wall.*—North India, Malacca. *Ferns British India, tab.* 257.

GENUS 60. NIPHOBOLUS. Kaulf.

1. Niphobolus adnascens, *Sw.*—General. *Ferns Southern India, tab.* 184. *Ferns British India, tab.* 161. (lævis.)

2. Niphobolus acrostichoides, *Forst.*—Birma, Malay Peninsula, Ceylon. *Ferns British India, tab.* 81.

3. NIPHOBOLUS LINGUA, *Sw.*—Rhizome wide-creeping clothed with spreading lanceolate ferruginous scales, stipes 3-6 inches long firm erect, frond oblong lanceolate 4-8 inches long 2-4 inches broad the apex often cuspidate, the base narrowed or rather rounded, the edge entire, texture coriaceous, upper surface naked, lower matted with close compact whitish cottony down, main veins distinct to the edge, sori rather large and prominent in close rows of 4-6 each between them.

North India up to 5,000 feet also in Japan and the Malay Islands (*Mettenius and Kuhn.* (*Lin.* 36, *p.* 140.) separate the Himalayan plant from the Japan species and call the former N. Heteractis). *Ferns British India, tab.* 385.

4. NIPHOBOLUS PANNOSUS, *Mett.*—Rhizome wide creeping as thick as a quill with small brown adpressed linear scales, stipes 1-6 inch matted with brown tomentum, frond lanceolate 2-6 inches long 1-1½ inch broad narrowed to both ends, texture subcoriaceous; under surface matted with close pale brown cottony tomentum, main veins erecto-patent ¼ inch apart, sori crowded 5-6 in a row between the main veins ceasing a space from the edge, *Kuhn. Linn.* 36, *p.* 141.

Ceylon and Moulmein, *Baker, Syn. Fil., 2nd edit., p.* 513, says that the Moulmein plant is closely allied but with smaller fronds and a thicker texture, I cannot distinguish it from the Ceylon plant. *Ferns Southern India, tab.* 240. (pannosus.)

5. NIPHOBOLUS STIGMOSUS, *Sw.*—North India, South India, (Vizagapatam hills.) *Ferns British India, tab.* 120 (costatus.)

6. NIPHOBOLUS SUBFURFURACEUS, *Hook.*—Assam. *Ferns British India, tab.* 259.

7. NIPHOBOLUS NUMMULARIFOLIUS, *Mett.*—North India. *Ferns British India, tab.* 320.

8. NIPHOBOLUS FLOCCIGERUS, *Mett.*—North India, Malacca. *Ferns British India, tab.* 386.

9. NIPHOBOLUS FISSUS, *Bl.*—General. *Ferns Southern India, tab.* 183. (porosus.)

10. NIPHOBOLUS FLOCCULOSUS, *Don*—North India. *Ferns British India, tab.* 162. (detergibilis.)

11. NIPHOBOLUS GARDNERI, *Mett.*—South India, Ceylon. *Ferns Southern India, tab.* 241.

12. NIPHOBOLUS PENANGIANUS, *Hook.*—Penang. *Ferns British India, tab.* 121.

13. NIPHOBOLUS BOOTHII, *Hook.*—North India. *Ferns British India, tab.* 258.

GENUS 61. PLEOPELTIS, HUMB & BONP. (Phymatodes, *Syn. Fil.*)

1. PLEOPELTIS ACCEDENS, *Bl.*—Malacca. *Ferns British India, tab.* 215.

2. PLEOPELTIS ROSTRATA, *Hook.*—North India. *Ferns British India, tab.* 159.

3. PLEOPELTIS LINEARIS, *Thunb.*—General. *Ferns Southern India, tab.* 180. (Wightiana.)

4. PLEOPELTIS STENOPHYLLA, *Bl.*—Malacca. *Ferns British India, tab.* 234.

5. PLEOPELTIS SINUOSA, *Wall.*—Birma and Malacca. *Ferns British India, tab.* 8.

6. PLEOPELTIS LONGIFOLIA, *Mett.*—Malacca. *Ferns British India, tab.* 7.

7. PLEOPELTIS SUPERFICIALIS, *Bl.*—North India, Malacca. *Ferns British India, tab.* 75.

8. PLEOPELTIS LANCEOLATA, *L.*—General. *Ferns Southern India, tab.* 181. (lepidota).

9. PLEOPELTIS ANGUSTATA, *Sw.*—North India, South India, *Ferns Southern India, tab.* 185. (Niphobolus).

10. PLEOPELTIS ZOSTERÆFORMIS, *Wall.*—Birma. *Ferns British India, tab.* 123. (probably only a narrowed form of pteropus, var. minor.)

11. PLEOPELTIS NORMALIS, *Don.*—North India, Malay Peninsula. *Ferns British India, tab.* 10.

12. PLEOPELTIS RHYNCOPHYLLA, *Hk.*—North India. *Ferns British India, tab.* 9.

13. PLEOPELTIS GRIFFITHIANA, *Hook.*—North India, *Ferns British India, tab.* 158.

14. PLEOPELTIS OVATA, *Wall.*—North India. *Ferns British India, tab.* 157.

15. PLEOPELTIS MEMBRANACEA, *Don.*—General. *Ferns Southern India, tab.* 177.

16. PLEOPELTIS HETEROCARPA, *Bl.*—North India. *Ferns British India, tab.* 319.

17. PLEOPELTIS PUNCTATA, *L.*—General. *Ferns Southern India, tab.* 178. (irioides).

18. Pleopeltis muscæfolia, *Bl.*—Birma, Malacca. *Ferns British India, tab.* 317.

19. Pleopeltis hemionitidea, *Wall.*—General. *Ferns Southern India, tab.* 182.

20. Pleopeltis pteropus, *Bl.*—North India. *Ferns British India, tab.* 11. (tridactyla).

21. Pleopeltis pteropus-minor—South India, Ceylon. *Ferns Southern India, tab.* 179. (tridactyla).

22. Pleopeltis trifida, *Don.*—General. *Ferns Southern India, tab.* 175. (oxyloba).

23. Pleopeltis malacodon, *Hook.*—This is very near Pleopeltis Stewartii, tab. 204, but the pinnæ are not so elongated or tapering, the rhizome scales are not so firm or so black and the rachis wants the loose spreading scales. Messrs Clarke and Atkinson who have seen them in a growing state think them different. North India up to 13,000 feet. *Ferns British India, tab.* 387.

24. Pleopeltis Stewartii, *Bedd.*—North India. *Ferns British India, tab.* 204.

25. Pleopeltis incurvata, *Bl.*—Malacca. *Ferns British India, tab.* 124.

26. Pleopeltis insignis, *Bl.*—Malacca. *Ferns British India, tab.* 214.

27. Pleopeltis phymatodes, *L.*—Ceylon, South India. *Ferns Southern India, tab.* 173.

28. Pleopeltis nigrescens, *Bl.*—General. *Ferns Southern India, tab.* 176.

29. Pleopeltis dilatata, *Wall.*—North India, Malacca. Ceylon (4,000 feet). *Ferns British India, tab.* 122.

30. Pleopeltis ebenipes, *Hook.*—North India. *Ferns British India, tab.* 138 (very near trifida).

31. Pleopeltis Moulmeinensis, *Bedd.*—Birma. *Ferns British India, tab.* 205.

32. Pleopeltis longissima, *Bl.*—Rhizome wide creeping the scales large ovate brown adpressed, stipes 3-4 feet long firm glossy, frond 1-4 feet long 6-12 inches broad cut down very nearly to the rachis into numerous erecto-patent acuminate linear subentire lobes 4-8 inches long $\frac{1}{4}$-$\frac{1}{2}$ inch broad, texture coriaceous, both sides naked, veins forming large distinct costular areolæ and beyond these smaller irregular ones, both with free veinlets, sori in close single rows near the midrib, forming distinct papillœ on the upper surface. *Syn. Fil., tab.* 366.

North India, Malacca.—(The Nilgiri locality is a mistake) differs from nigrescens in the pinnæ being much narrowed. I have never received specimens of this from India, but Mr. Clarke informs me that he has found it floating on jheels in Assam, it is in cultivation at Kew, and the drawing is from specimens gathered there. *Ferns British India, tab.* 388.

33. Pleopeltis palmata, *Bl.*—Malacca. *Ferns British India, tab.* 156.

34. Pleopeltis juglandifolia, *Don.*—North India. *Ferns British India, tab.* 12. (capitellata).

35. Pleopeltis juglandifolia, var, *β.* tenuicauda, *Hook,* pinnæ narrower very acuminate narrowed at the base and the lower ones often a little stalked, not figured.

36. Pleopeltis lehmanni, *Mett.*—North India, Birma. *Ferns British India, tab.* 260.

37. Pleopeltis Himalayensis, *Hook.*—North India. *Ferns British India, tab.* 318.

38. Pleopeltis leiorhiza, *Wall.*—General. *Ferns Southern India, tab.* 174.

GENUS 62. DIPTERIS. Reinw.

1. Dipteris Horsfieldii, *B. Br.*—Malacca. *Ferns British India, tab.* 321. (Polypodium Dipteris, *Syn. Fil.*)

2. Dipteris Wallichii, *R. Br.*—North India. *Ferns British India, tab.* 80.

3. Dipteris lobbiana, *Hook.*—Malacca. *Ferns British India, tab.* 233. (bifurcata, *Syn. Fil.*)

GENUS 63. DRYNARIA. Bory.

1. Drynaria conjugata, *Lam.*—North India. *Ferns British India, tab.* 13. (coronans).

2. Drynaria splendens, *Hook.*—Singapore. *Ferns British India, tab.* 316.

3. Drynaria propinqua, *Wall.*—North India. *Ferns British India, tab.* 160.

4. Drynaria mollis, *Bedd.*—North India. *Ferns British India, tab.* 216. (rivalis, Mett, *Syn. Fil.* a later name.)

5. Drynaria quercifolia, *L.*—General. *Ferns Southern India, tab.* 187. *Ferns British India, tab.* 315. (Linnæi).

6. Drynaria rigidula, *Sw.*—Malacca. *Ferns British India, tab.* 314. (diversifolia).

7. Drynaria Parishii, *Bedd.*—Birma. *Ferns British India, tab.* 125. (Pleopeltis).

TRIBE XI. GRAMMITIDEÆ.

GENUS 64. NOTHOCHLÆNA. R. Br.

1. Nothochlæna Marantæ, *R. Br.*—North India. *Ferns British India, tab.* 1.

GENUS 65. MONOGRAMME. Sckh.

1. Monogramme parodoxa, *Fee.*—Ceylon. *Ferns Southern India, tab.* 210. (Junghuhnii).

GENUS 66. GYMNOGRAMME. Desv. (including Grammitis of this work.)

1. Gymnogramme totta, *Schl.*—General. *Ferns Southern India, tab.* 49.

2. Gymnogramme aurita, *Hook.*—North India. *Ferns British India, tab.* 152. (perhaps only a gymnogrammoid form of Phegopteris distans.)

3. Gymnogramme opaca, *Spr.*—North India. *Ferns British India, tab.* 238.

4. Gymnogramme Andersoni, *Bedd.*—North India. *Ferns British India, tab.* 270.

5. Gymnogramme fraxinea, *Don.*—North India, Ceylon. *Ferns Southern India, tab.* 232. (serrulata, *Bl.*) *Ferns British India, tab.* 57. (Javanica, *Bl.*) (The oldest names are fraxinea and falcata, *Don*).

6. Gymnogramme leptophylla, *Desv.*—General. *Ferns Southern India, tab.* 270.

7. Gymnogramme microphylla, *Hook.*—North India. *Ferns British India, tab.* 148.

Baker in the Synopsis refers 1-3 to the subgenus Leptogramme, because the habit and mode of growth is that of Phegopteris and Lastrea, 4-7 have the habit and mode of growth of Cheilanthes.

GENUS 67. STEGNOGRAMME. Bl.

1. Stegnogramme aspidioides, *Hook.*—North India, Ceylon. *Ferns British India, tab.* 149.

GENUS 68. SYNGRAMME. J. Sm.

1. Syngramme Wallichii, *Hook.*—Singapore. *Ferns British India, tab.* 153.

2. Syngramme alismæfolia, *Hook.*—Singapore. *Ferns British India, tab.* 240.

3. Syngramme vestita, *Hook.*—North India. *Ferns British India, tab.* 154.

GENUS 69. SELLIGUEA, Bory. (including Loxogramma of this work).

1. Selliguea lanceolata, *Hook.*—General. *Ferns Southern India, tab.* 51. (Loxogramma).

2. Selliguea involuta, *Don.*—General. *Ferns Southern India, tab.* 50. (Loxogramma).

3. Selliguea avenia, *Bl.*—Malacca. *Ferns British India, tab.* 266. (Loxogramma).

4. Selliguea Feei, *Bory.*—Malacca. *Ferns British India, tab.* 151.

5. Selliguea Hamiltoniana, *Wall.*—North India. *Ferns British India, tab.* 239.

6. Selliguea caudiformis, *Hook.*—Birma, (description only.)

7. Selliguea elliptica, *Thunb.*—North India, Birma. *Ferns British India, tab.* 150. (decurrens).

8. Selliguea Maingayi, *Baker.*—Stipe 1½ feet dull brown naked, frond deltoid under 1 foot with 5 oblongo lanceolate pinnæ, th (end one largest 5-6 inches long 18-21 lines broad slightly repand, narrowed gradually at base the lowest pair distant, texture membranous, surfaces glabrous, main veins distinct to edge ¼ inch apart; areolæ copious minute with free included veinlets, sori very copious minute irregular, punctiform or confluent in lines or curves. *Syn. Fil., 2nd edit., p.* 517. Malacca, *not figured.*

GENUS 70. BRAINEA. Hk.

1. Brainea insignis, *Hk.*—North India and Birma. *Ferns British India, tab.* 139.

GENUS 71. MENISCIUM. Schreb.

1. Meniscium triphyllum, *Sw.*—General. *Ferns Southern India, tab.* 56.

2. Meniscium Thwaitesii, *Hk.*—Ceylon, South India, Silent Valley, West slopes of Nilgiris. *Ferns Southern India, tab.* 223.

3. Meniscium Parishii, *Bedd.*—Birma. *Ferns British India, tab.* 184.

4. Meniscium salicifolium, *Wall.*—Penang and Singapore. *Ferns British India, tab.* 207.

5. Meniscium cuspidatum, *Bl.*—North India, Malay Peninsula. *Ferns British India, tab.* 309.

GENUS 72. ANTROPHYUM. Kaulf.

1. Antrophyum plantagineum, *Kaulf.*—General. *Ferns Southern India, tab.* 52. (reticulatum). *Ferns British India, tab.* 267. (parvulum).

2. Antrophyum reticulatum, *Kaulf.*—General. *Ferns Southern Indiä, tab.* 231. I cannot distinguish coriaceum, *Wall.* or semicostatum, *Bl.* from this species, but they are kept distinct in the Synopsis Filicum.

3. Antrophyum latifolium, *Bl.*—North India. *Ferns British India, tab.* 176.

GENUS 73. VITTARIA. Sm.

1. Vittaria elongata, *Sw.*—General. *Ferns Southern India, tab.* 21.

2. Vittaria minor, *Fee.*—Birma. *Ferns British India, tab.* 56.

GENUS 74. TÆNIOPSIS. J. Sm.

1. Tæniopsis falcata, *Kze.*—Malacca and Birma. *Ferns British India, tab.* 117. (amboinensis).

2. Tæniopsis sulcata, *Kuhn. Linn.* 36., *p.* 68.—Ceylon. *Ferns British India, tab.* 175. (falcata, *Kze?*)

3. Tæniopsis lineata, *Sw.*—General. *Ferns Southern India, tab.* 54.

4. Tæniopsis scolopendrina, *J. Sm.*—Ceylon. *Ferns Southern India, tab.* 212.

(The Nilgiris are given as a locality in the *Syn. Fil.*, but I have never heard of its being found anywhere in the Peninsula).

GENUS 75. DRYMOGLOSSUM. Presl.

1. Drymoglossum carnosum, *Hook.*—North India. *Ferns British India, tab.* 55.

2. Drymoglossum piloselloides, *Presl.*—General. *Ferns Southern India, tabs.* 55 and 186, (Niphobolus nummularifolius).

GENUS 76. HEMIONITIS. Linn.

1. Hemionitis arifolia, *Burm.*—General. *Ferns Southern India, tab.* 53. (cordifolia).

2. Hemionitis Griffithii, *H. f. et T.*—North India. *Ferns British India, tab.* 155. (Dictyocline).

TRIBE XII. ACROSTICHEÆ.

GENUS 77. ELAPHOGLOSSUM. Schott.

1. Elaphoglossum conforme, *Sw.*—General. *Ferns Southern India, tab.* 198.

2. Elaphoglossum laurifolium, *Thouars.*—General. *Ferns Southern India, tab.* 200. (perhaps not distinct from some of the forms of latifolium, *Sw.*) Included under conforme in the *Syn. Fil.*—Mettenius. (*Ann. Mus. Leyd, Vol.* iv. 292, gives it a new name "commutatum").

3. ELAPHOGLOSSUM NORRISII, *Hook.*—Penang (description only) (I could not distinguish the specimens in the Kew Herb from some forms of conforme).

4. ELAPHOGLOSSUM, VISCOSUM, *Sw.*—North India and South India. *Ferns Southern India, tab.* 196. *Baker Syn. Fil. 2nd edit., p.* 521. distinguishes the South Indian form as "stelligerum" of Wallich, after a careful comparison of all the specimens, I was not able to separate it from some forms from the Himalayas and other parts.

5. ELAPHOGLOSSUM STIGMATOLEPIS, *Fee.*—Southern India. *Ferns Southern India, tab.* 199.

6. ELAPHOGLOSSUM SQUAMOSUM, *Sw.*—Southern India, and Ceylon. *Ferns Southern India, tab.* 197.

7. ELAPHOGLOSSUM SPATHULATUM, *Bory.*—Ceylon. *Ferns Southern India, tab.* 209.

GENUS 78. STENOCHLÆNA. J. SM.

1. STENOCHLÆNA SORBIFOLIA, *L.*—Birma and Ceylon. *Ferns British India, tab.* 192. (Lomariopsis): *Ferns British India, tab.* 209-210? abnormal forms.

2. STENOCHLÆNA PALUSTRE, *L.*—General. *Ferns Southern India, tab.* 201. (scandens.)

GENUS 79. POLYBOTRYA. H. B. K.

(Egenolfia, *Syn. Fil.* separated from Polybotrya only on account of the seta in the sinus of the lobes).

1. POLYBOTRYA APPENDICULATA, *Willd.*—General. *Ferns Southern India, tab.* 194. *Ferns British India, tab.* 111 (upper eft hand figure).

2. POLYBOTRYA APPENDICULATA, var. β, aspleniifolia, *Bory.*—General. *Ferns Southern India, tab.* 195.

3. POLYBOTRYA APPENDICULATA, var. γ ludens, *Wall.*—North India, and Birma. *Ferns British India, tab.* 110. (costulata); *Ferns British India, tab.* 111. upper right hand figure.

4. POLYBOTRYA APPENDICULATA, var. δ HAMILTONIANA, *Wall.*—North India and Birma. *Ferns British India, tab.* 111. lower figure (sori bead-like).

GENUS 80. GYMNOPTERIS. BERNH, (including Pæcilopteris of this work).

Baker in his Synopsis Filicum makes 2 subgenera of this, viz. "Gymnopteris" with the main veins distinct nearly to the edge and "Chrysodium" with the main veins wanting or indistinct. I do not find these differences constant, his Chrysodium semicordatum is the same plant as Gymn. contaminans (which he includes under his Gymn. virens,) and Chrysodium lanceolatum, and axillare exhibit every form of venation from one supposed subgenus to the other.

1. GYMNOPTERIS LANCEOLATA, *Hk.*—General. *Ferns Southern India, tab.* 48 (Feei.) *Ferns British India, tab.* 274. abnormal forms.

2. GYMNOPTERIS LANCEOLATA, var. trilobata, *Bedd.*—Southern India. *Ferns Southern India, tab.* 273.

3. GYMNOPTERIS LANCEOLATA, var. pinnatifida, *Bedd.*—Ceylon. *Ferns Southern India, tab.* 211.

4. GYMNOPTERIS AXILLARIS, *Cav.*—Southern India. *Ferns British India,* (only a creeping form of lanceolatum I believe.)

5. GYMNOPTERIS WALLII, *Baker.*—Sterile fronds linear 8-9 inches long $\frac{1}{4}$-$\frac{3}{8}$th inch broad narrowed at both ends, fertile frond with the fructification often interrupted. *Syn. Fil., 2nd edit., tab.* 421.—I belive only a variety of Gymnopteris lanceolata. Ceylon, *Ferns British India, tab* 389.

6. GYMNOPTERIS METALLICA, *Bedd.*—Fronds quite sessile 3-7 inches long up to nearly 1 inch broad of a deep shining metalic blue color, fertile fronds only soriferous towards the apex. Ceylon in dense moist forests on the Haycock mountain growing on rocks. This is intermediate between Wallii and true lanceolata and is, I believe, only a variety of the latter, it is a very beautiful plant. *Ferns British India, tab.* 390.

7. GYMNOPTERIS MINUS, *Mett.*—North India. *Ferns British India, tab.* 116. (probably only a small form of lanceolatum).

8. GYMNOPTERIS VARIABILIS, *Hk.*—South India, Ceylon and Birma. *Ferns British India, tab.* 272. Extreme forms particularly some from Birma have very prominent main veins, others show every variation to the venation of lanceolata.

9. GYMNOPTERIS QUERCIFOLIA, *Retz.*—South India and Ceylon. *Ferns Southern India, tab.* 47.

10. GYMNOPTERIS TRICUSPIS, *Hk.*—North India. *Ferns British India, tab.* 53.

11. GYMNOPTERIS FLAGELLIFERA, *Wall.*—North India and Birma. *Ferns British India, tab.* 112. (Pæcilopteris).

12. GYMNOPTERIS SUBREPANDA, *Hook.*—Penang. *Ferns British India, tab.* 339. (Pæcilopteris).

13. GYMNOPTERIS BLUMEANA, *Hook.*—North India, description only. (under Pæcilopteris).

14. GYMNOPTERIS CONTAMINANS, *Wall.*—General. *Ferns Southern India, tab.* 202. repanda (Pæcilopteris). *Ferns British India, tab.* 270. (semicordata).

This includes Wallich's virens and crispatula, *Baker Syn. Fil. 2nd edit., p.* 420, has lumped this and the next 2 species all into one under the name of virens, he now distinguishes between contaminans and terminans (the venation being very different) but considers costata a large form of terminans.

15. GYMNOPTERIS TERMINANS, *Wall.*—General. *Ferns Southern India, tab.* 203. (Pæcilopteris).

16. GYMNOPTERIS COSTATA, *Wall.*—North India. *Ferns British India, tabs.* 113, 114 and 115. (Pæcilopteris). Varieties deltigera and undulata, *tabs*, 114 and 115 are only abnormal forms, I believe, and not constant varieties but I have not seen them growing.

17. GYMNOPTERIS PRESLIANA, *Hook.*—South India. *Ferns British India, tab.* 269.

GENUS 81. HYMENOLEPIS. KAULF.

1. HYMENOLEPIS SPICATA, *L.*—North and South India, and Ceylon. *Ferns British India, tab.* 269. I constantly find Gymnopteris lanceolata with its broad sterile fronds contracted at the apex and soriferous and the same occurs constantly with G. tricuspis. This genus will therefore have probably to be suppressed in favor of Gymnopteris.

GENUS 82. ACROSTICHUM. L.

1. ACROSTICHUM AUREUM, *L.*—General. *Ferns Southern India, tab.* 204.

I look upon this as very distinct as a genus from any of the Gymnopteris group with which Baker associates it.

GENUS 83. PHOTINOPTERIS. J. SM.

This genus will probably have to give way in favor of Drynaria with which it quite agrees in habit and venation, the 2 species are better associated with Aglaomorpha Meyeniana and Dryostachyum splendens (Philippine plants which have already gone into Drynaria) than with any of the Acrosticheæ.

1. PHOTINOPTERIS RIGIDA, *Wall.*—Malacca. *Ferns British India, tab.* 211.

2. PHOTINOPTERIS DRYNARIOIDES, *Hk.*—Penang. *Ferns British India, tab.* 325.

GENUS 84. PLATYCERIUM. DESV.

1. PLATYCERIUM GRANDE, *J. Sm.*—Singapore. *Ferns British India, tab.* 326.

2. PLATYCERIUM BIFORME, *Bl.*—Birma. *Ferns British India, tabs.* 109 & 224.

3. PLATYCERIUM WALLICHII, *Hk.*—Birma. *Ferns British India, tab.* 108.

SUB-ORDER OSMUNDACEÆ.

GENUS 85. OSMUNDA. L.

1. OSMUNDA JAVANICA.—South India and Ceylon. *Ferns Southern India, tab.* 77.

2. OSMUNDA CLAYTONIANA, *L.*—North India. *Ferns British India, tab.* 187.

3. OSMUNDA REGALIS, *L.*—General. *Ferns Southern India, tab.* 76.

SUB-ORDER SCHIZÆACEÆ.

GENUS 86. SCHIZÆA. SMITH.

1. SCHIZÆA MALACCANA, *Baker.*—Malacca. *Ferns British India, tab.* 255.

2. SCHIZÆA DICHOTOMA, *Sw.*—South India and Ceylon. *Ferns Southern India, tab.* 65.

3. SCHIZÆA DIGITATA, *Sw.*—North India and Ceylon. *Ferns Southern India, tab.* 268.

GENUS 87. ANEMIA. Sw.

1. Anemia tomentosa, *Sw.*, var. Wightiana, *Gardn.*—South India. *Ferns Southern India, tab.* 66.

GENUS 88. LYGODIUM. Sw.

1. Lygodium dichotomum, *Sw.*—General. *Ferns Southern India, tab.* 62.
2. Lygodium scandens, *Sw.*—General. *Ferns Southern India, tab.* 61.
3. Lygodium pinnatifidum, *Sw.*—General *Ferns Southern India, tab.* 63. (flexuosum).
4. Lygodium polystachyum, *Wall.*—Birma. *Ferns British India, tab.* 300.
5. Lygodium japonicum, *Sw.*—General. *Ferns Southern India, tab.* 64.

SUB-ORDER MARATTIACEÆ.

GENUS 89. ANGIOPTERIS. Hoffm.

1. Angiopteris evecta, *Hoffm.*—*Ferns Southern India, tab.* 78.

GENUS 90. MARATTIA. Sm.

1. Marattia fraxinea, *Sm.*—General. *Ferns Southern India, tab.* 79.

GENUS 91. KAULFUSSIA. Blume.

1. Kaulfussia æculifolia, *Bl.*—North India and Malay Peninsula. *Ferns British India, tab.* 185.

SUB-ORDER OPHIOGLOSSACEÆ.

GENUS 92. OPHIOGLOSSUM. L.

1. Ophioglossum bulbosum, *Michx.*—South India. *Ferns Southern India, tab.* 72. (brevipes).
2. Ophioglossum nudicaule, *L. f.*—South India, Malacca. *Ferns Southern India, tab.* 71. (parvifolium).
3. Ophioglossum reticulatum, *L.*—General. *Ferns Southern India, tab.* 70.

These 3 species are well marked and easily distinguished as far as South Indian individuals are concerned. No. 1 has round tuberous roots, the frond of a stout texture, and indistinct venation ; No. 2 is a very minute form ; No. 3 has a wiry rootstock, the frond of a thin texture, and prominent venation. An immense number of species of this section (Euophioglossum "fertile spike single from the base of the barren segment") have been described and these have been reduced to 6 in the Synopsis, but looking through the large collection at Kew from all parts of the world, I was inclined to think that they might all be considered mere local varieties of one species, there are very gradual transitions from the wiry to the tuberous root stock, and from the stout veinless to the thin prominently veined texture.—There are Himalayan specimens referred to "lusitanicum," L. and to "vulgatum," L. these both appear to be intermediate between reticulatum and bulbosum.

4. Ophioglossum pendulum, *L.*—Ceylon, North India and Malacca. *Ferns Southern India, tab.* 269.

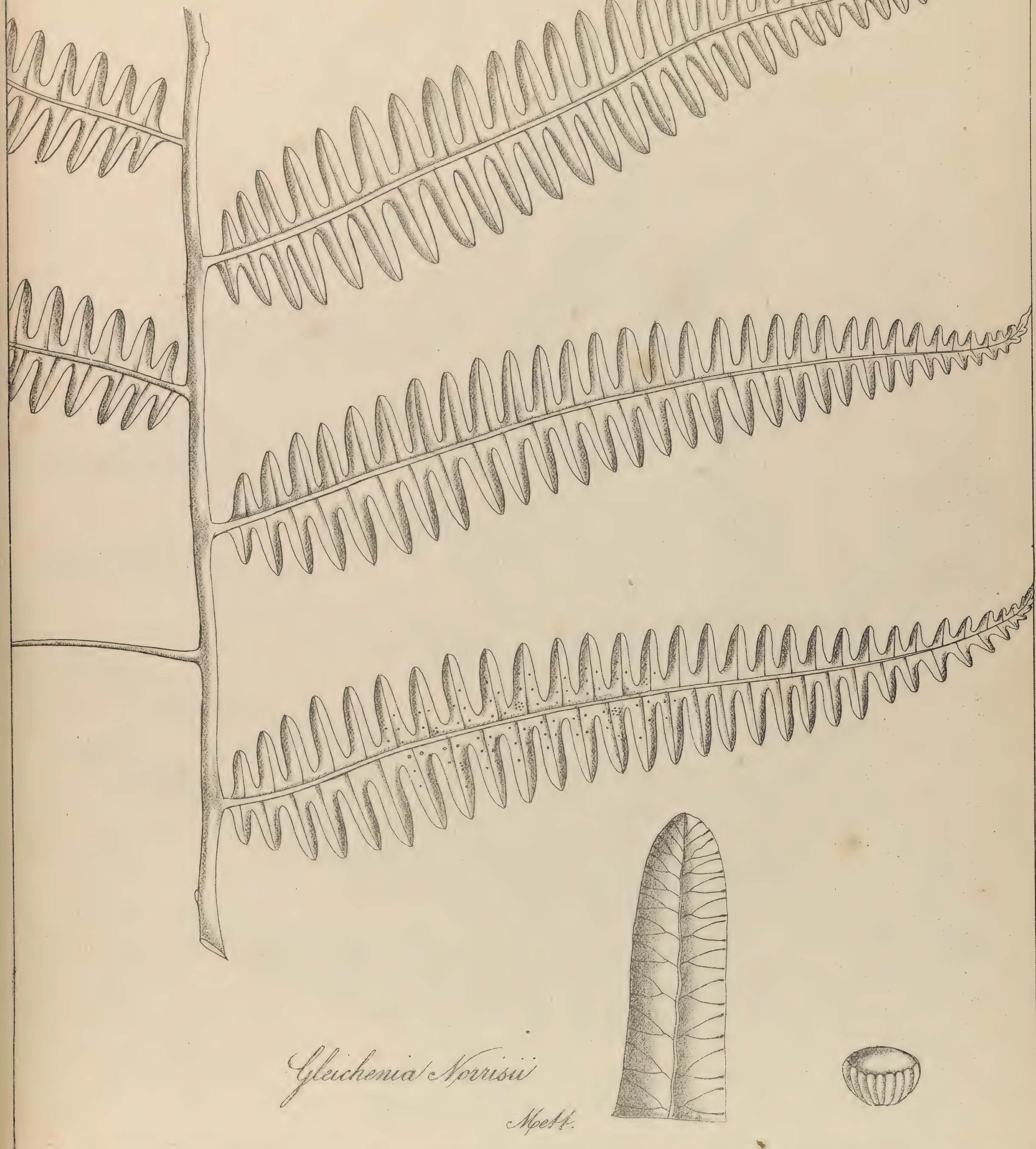
GENUS 93. HELMINTHOSTACHYS. Kaulf.

1. Helminthostachys zeylanica, *Hk.*—General. *Ferns Southern India, tab.* 69.

GENUS 94. BOTRYCHIUM. Sw.

1. Botrychium Lunaria, *Sw.*—North India. *Ferns British India, tab.* 208.
2. Botrychium daucifolium, *Wall.*—General. *Ferns Southern India, tab.* 69. (subcarnosum).
3. Botrychium virginianum, *Sw.*, var. lanuginosum, *Wall.*—General. *Ferns Southern India, tab.* 67.

(*N. B.*—Since the first part of this List was printed, Litobrochia incisa has been found at Walaghat on the west slopes of the Nilgiris.)



Gleichenia Norrisii

Mett.

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LITHO.R BY T.C.NYNASAWMY CHETTY.

Palavia Elwesii Baker!

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Trichomanes pyxidiferum (L)

var: limbatum. Wall.

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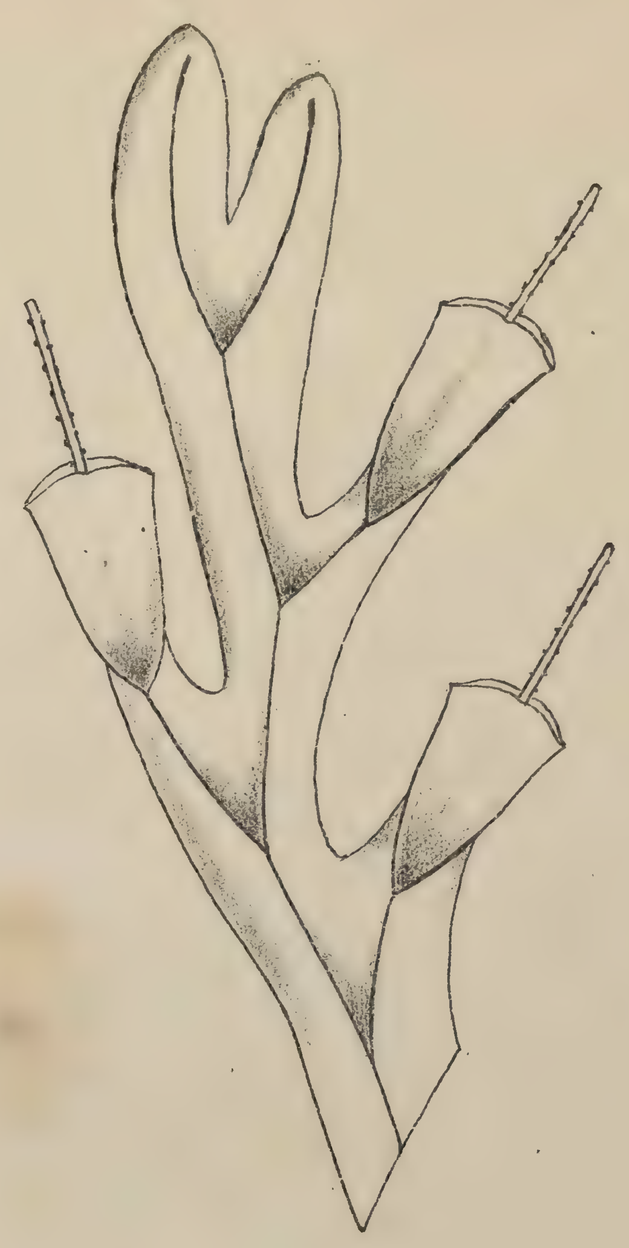

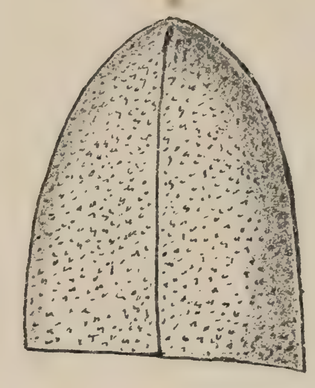

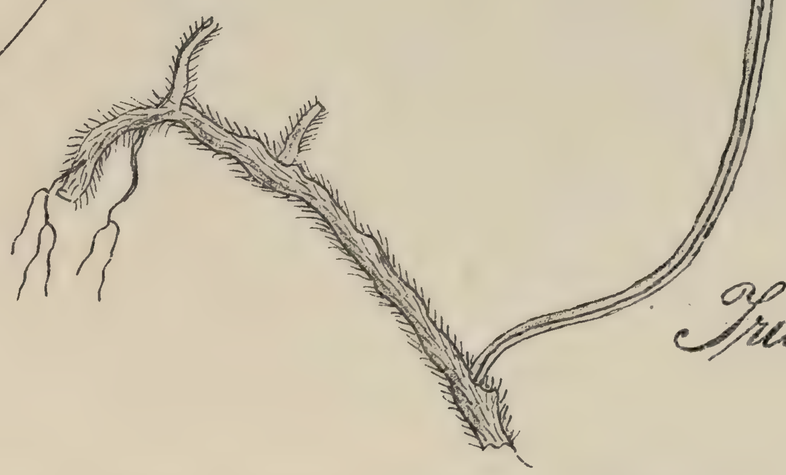

Trichomanes Birmanicum

Bedd.

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Davallia epiphylla (Bl)

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LITHP BY T.C NYNASAWNY CHETTY.

Davallia Lorrainei. (Hance)

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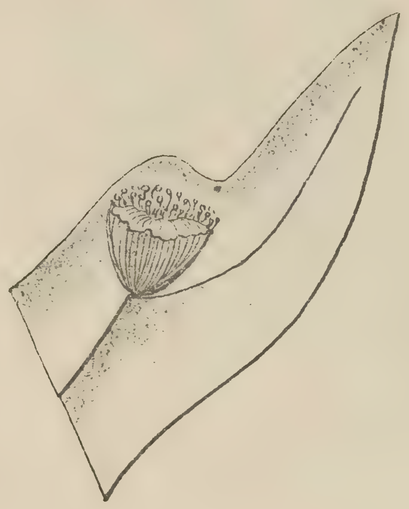

Davallia speciosa.

Mett.

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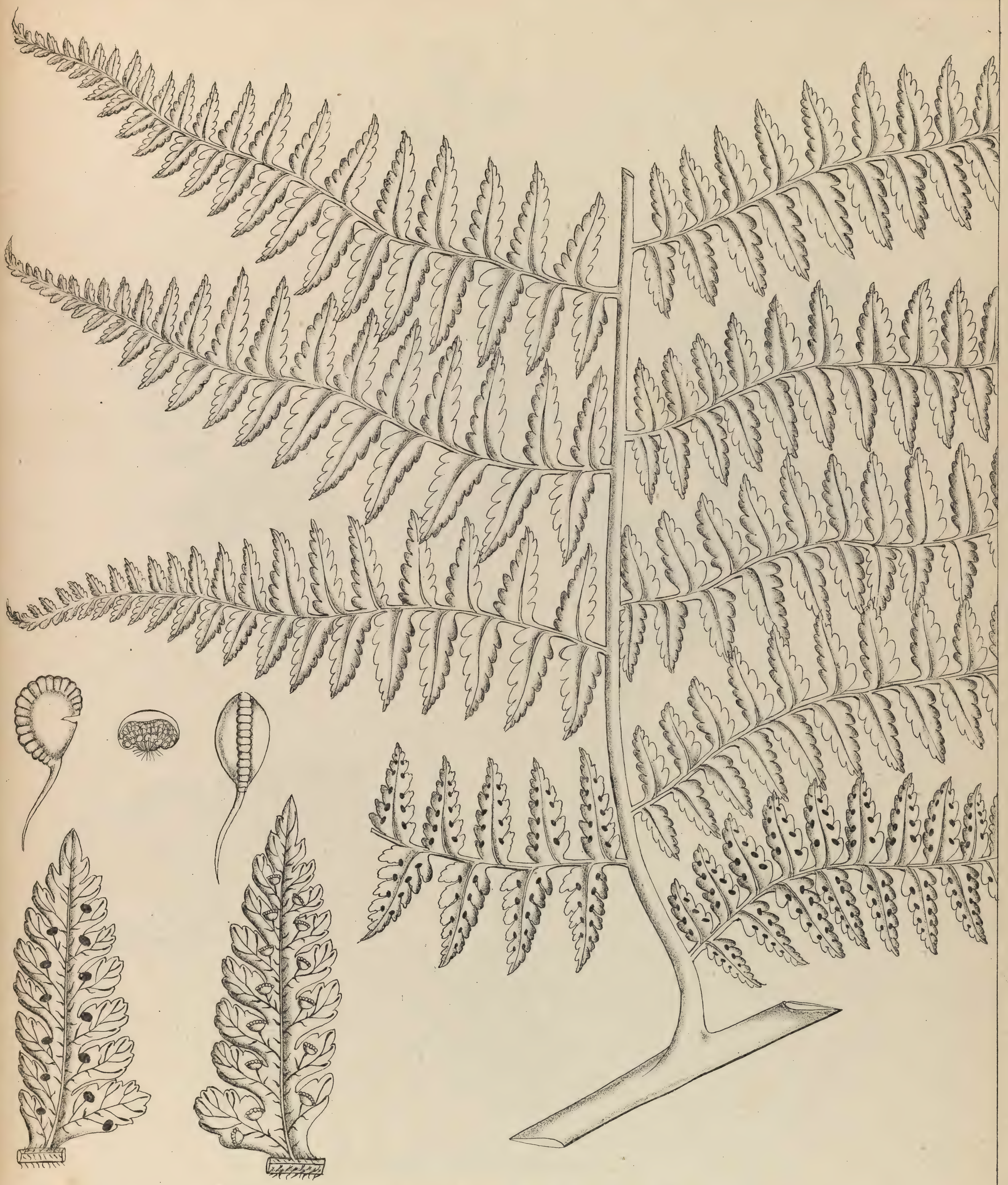

Microlepia Speluncæ (Linn)

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Adiantum lunulatum.

var. Mettenii Kuhn.

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Asplenium Gardneri

Baker.

Asplenium resectum.(Sm)
var: pivale. Bedd.

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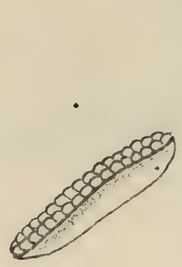

Asplenium resectum (sm)

Var decurrens. Wall

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Asplenium resectum (Sm)

var: delicatulum Parish

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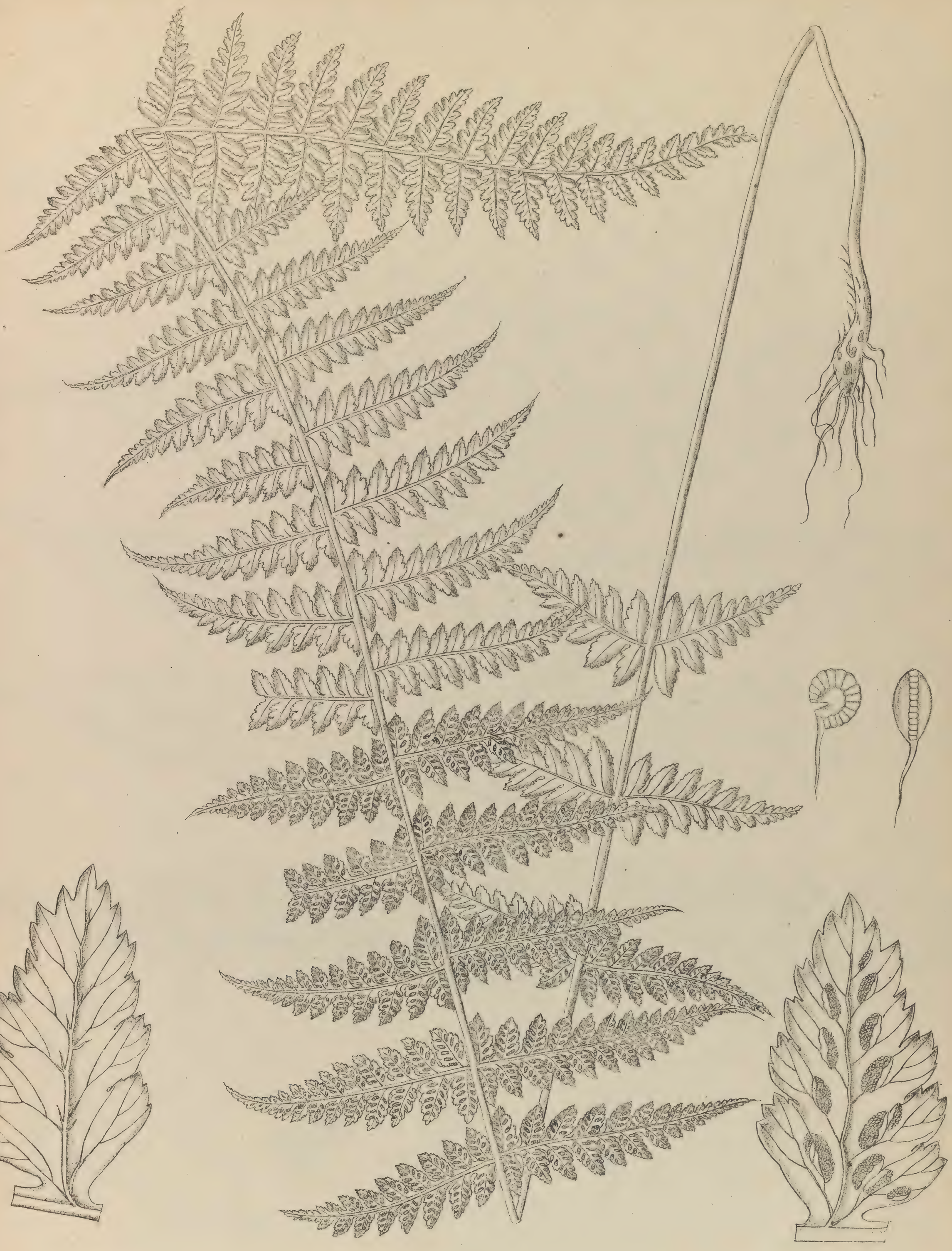
Athyrium Atkinsoni

Bedd.



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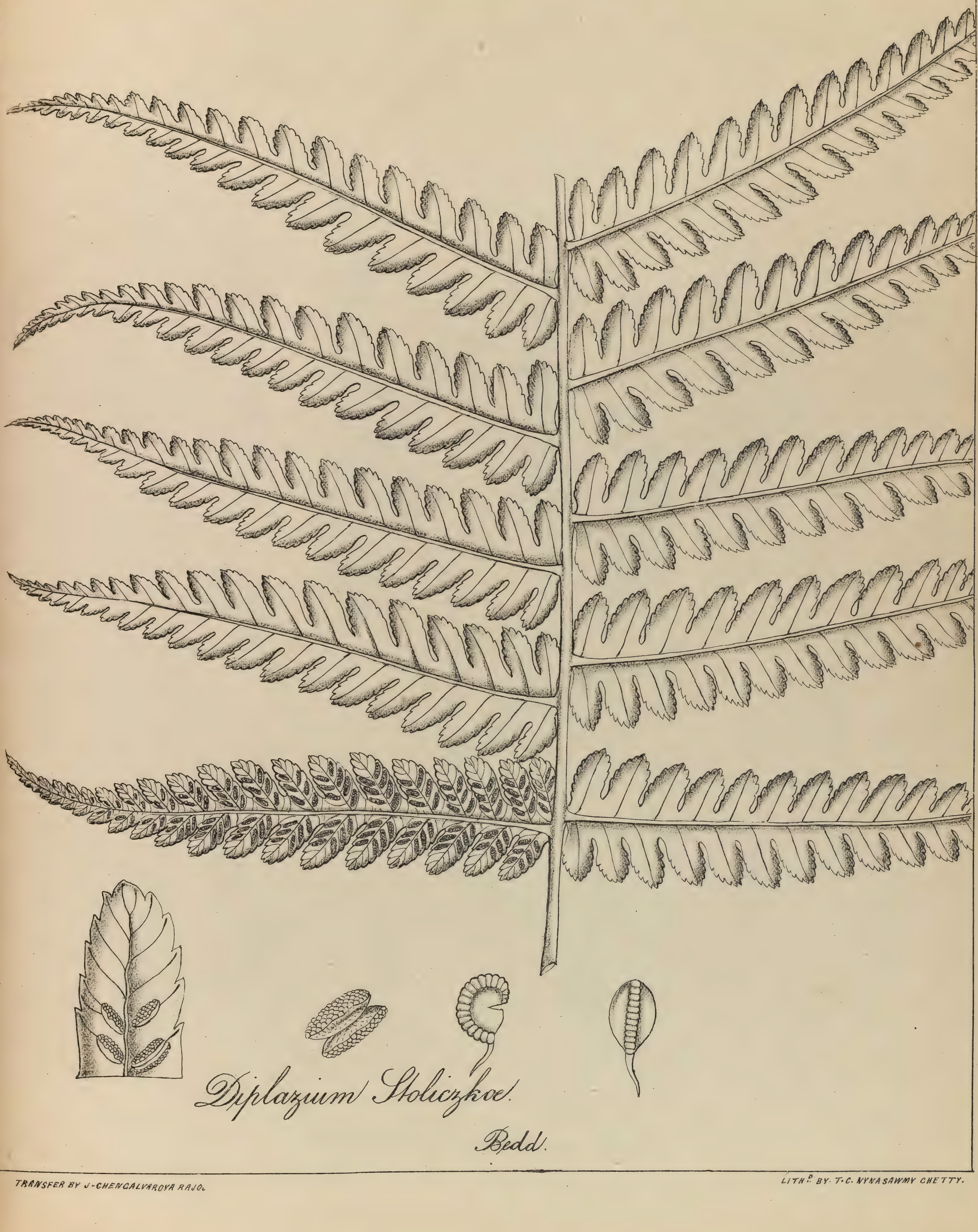
Aspidium Clarkei.

Bedd.



Diplazium Stoliczkae.

Bedd.

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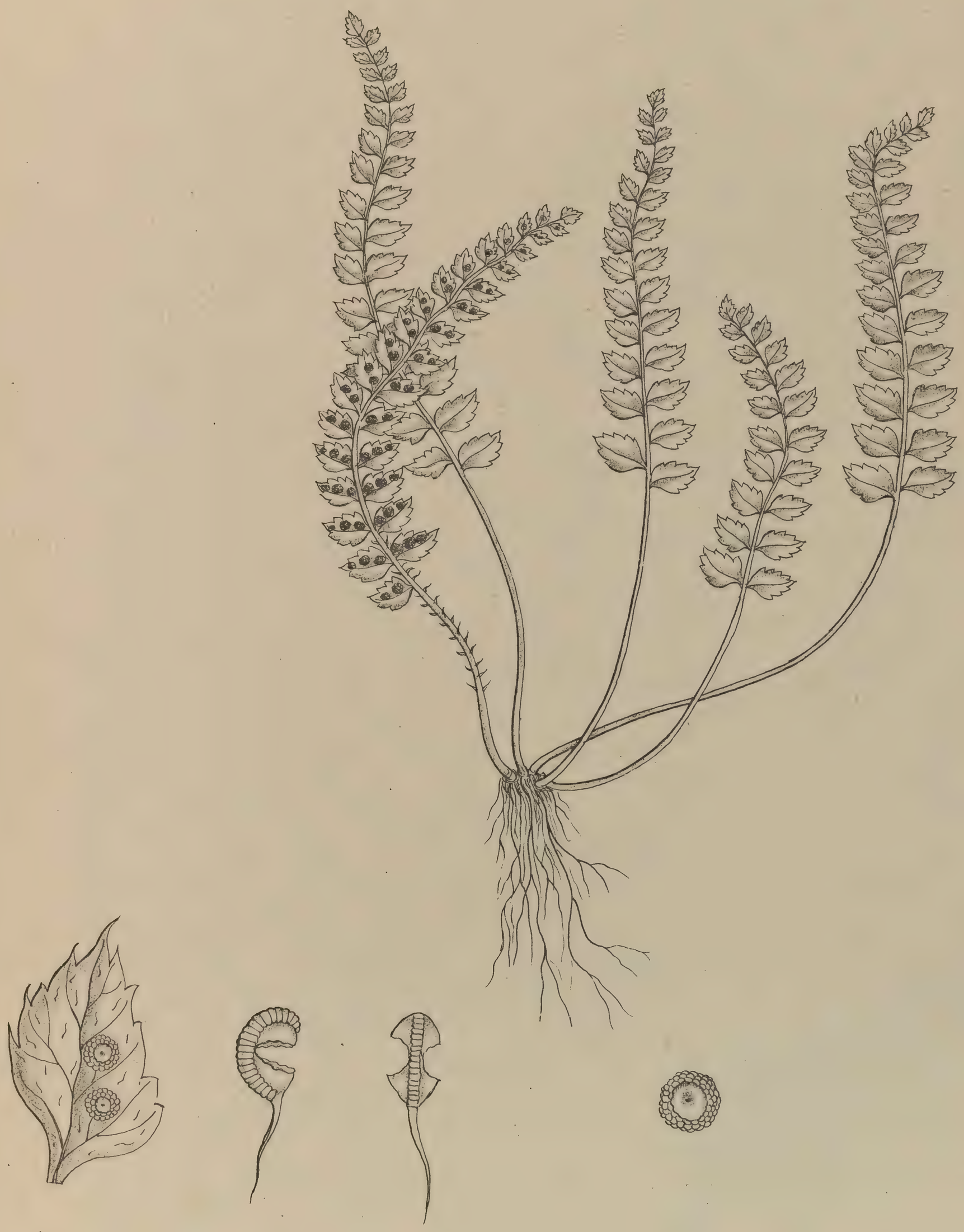

Polystichum Atkinsoni. (Bedd.)

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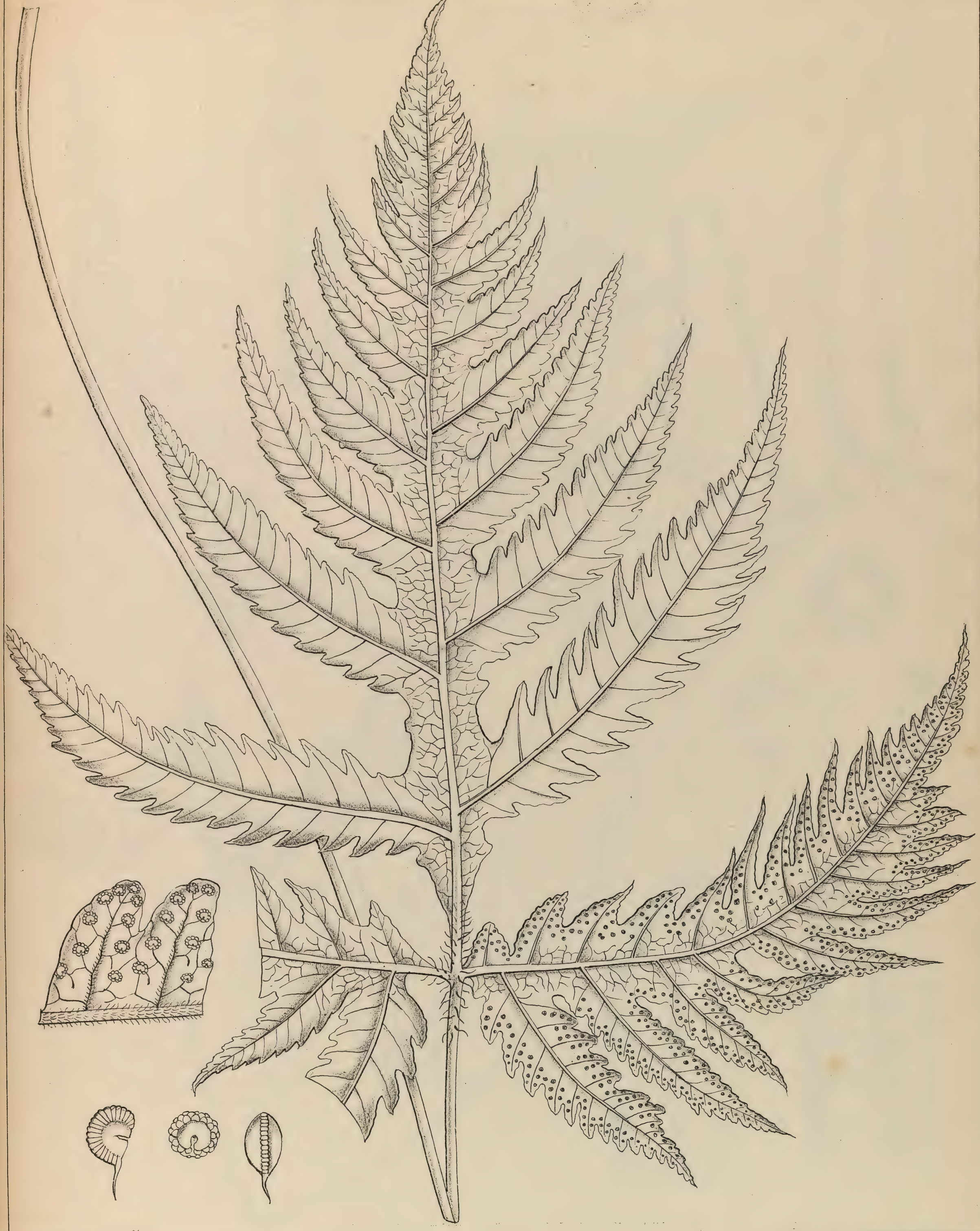
TRANSFER BY C.

LITH.ª BY T.C.N.

Polystichum auriculatum

Var. marginatum. Wall.



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Aspidium subconfluens.

Bedd.

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Aspidium variolosum

Wallich.

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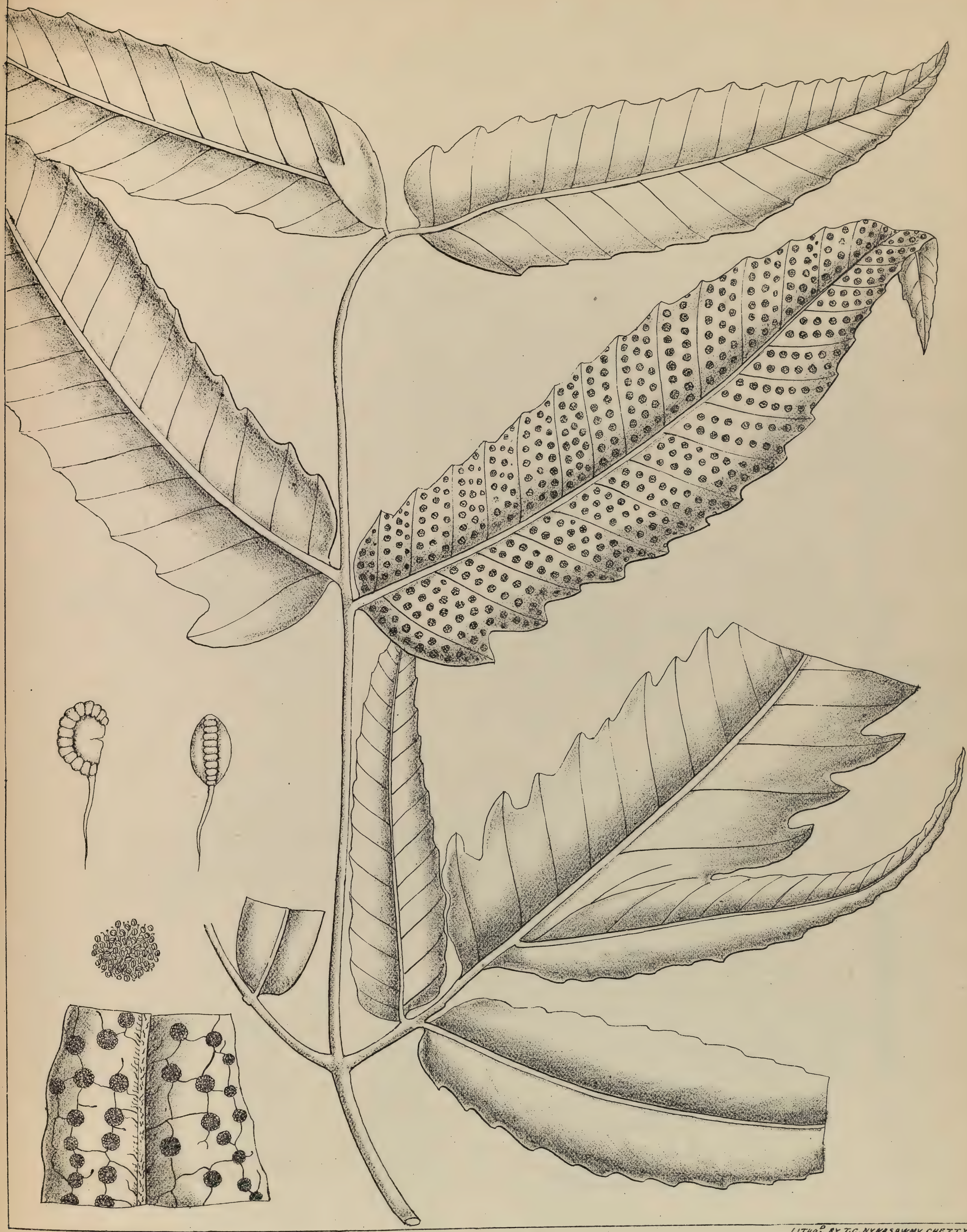
Aspidium fuscipes. Wall.



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Aspidium Simonsii

Baker.

Pleocnemia Clarkei

Bedd.

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LITHO.ᴿ BY T.C. NYNASAWMY CHETTY.

Lastrea aristata (Sw)
Var: Hamiltonii Spr.

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Lastrea Bergiana

Schl.

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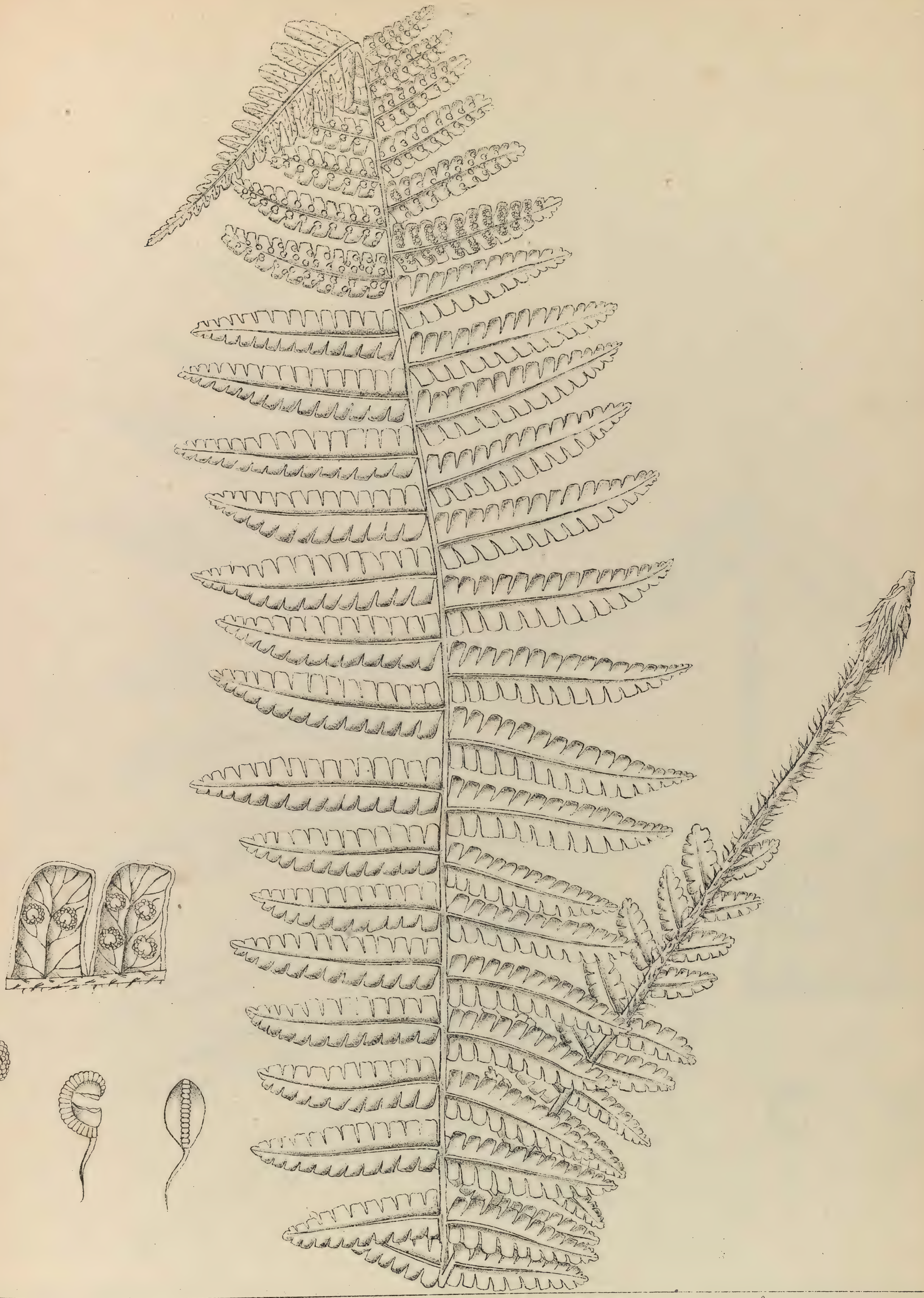

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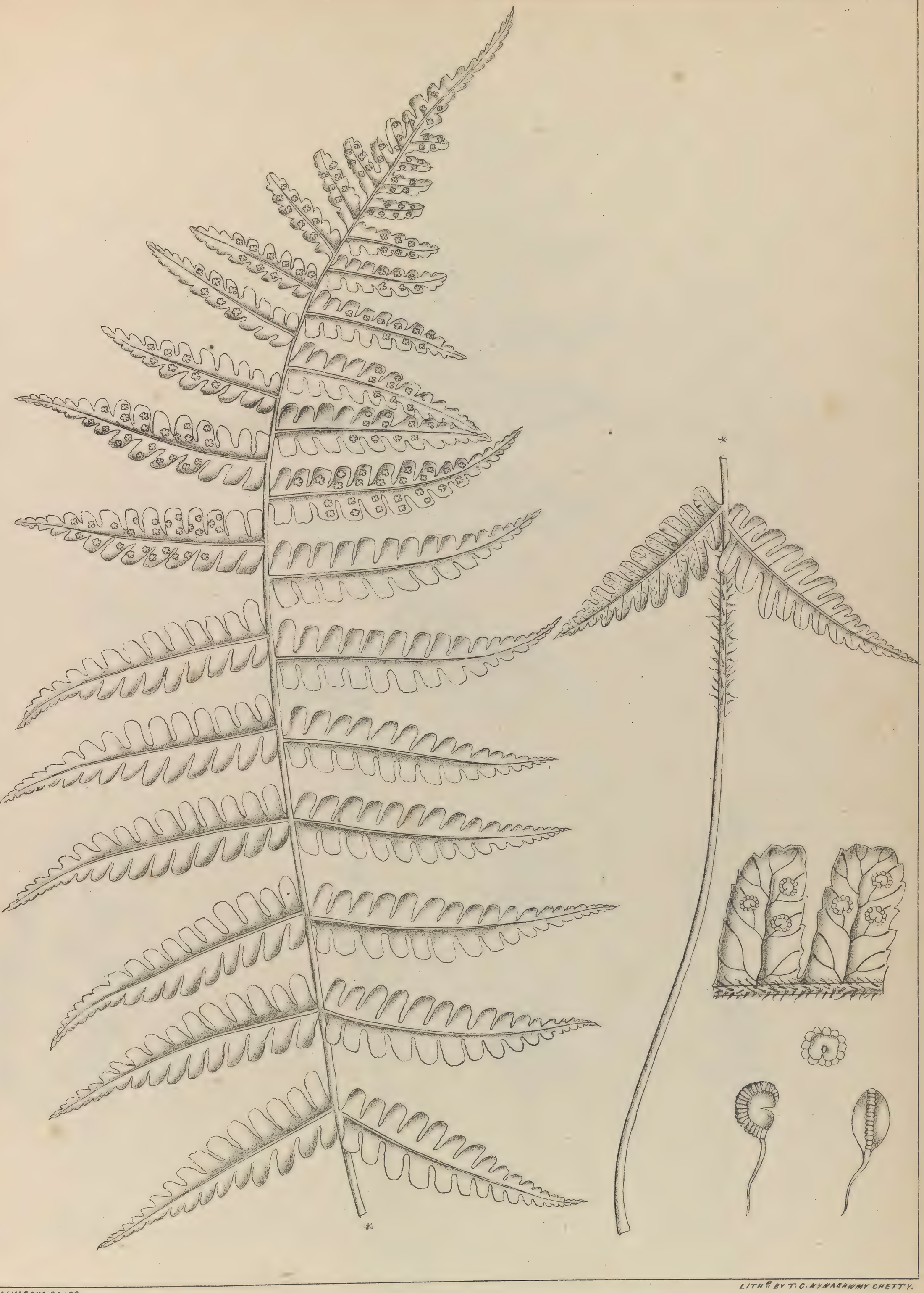
Lastrea Filix-mas

var: Clarkei Baker.



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Lastrea Filix-mas.

var. Nidus Clarke.

Lastrea Filix (mas)

var. odontoloma. Moore.

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LITH.ᵒ BY T.C. NYNASAWMY CHETTY.

Lastrea sparsa
var: nitidula. Wall.

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Lastrea sparsa.

var. plurisissima. Mett.

Lastrea Elwesii (Baker)

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Lastrea Hendersoni (Bedd)

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Nephrodium elatum.

Bojer.

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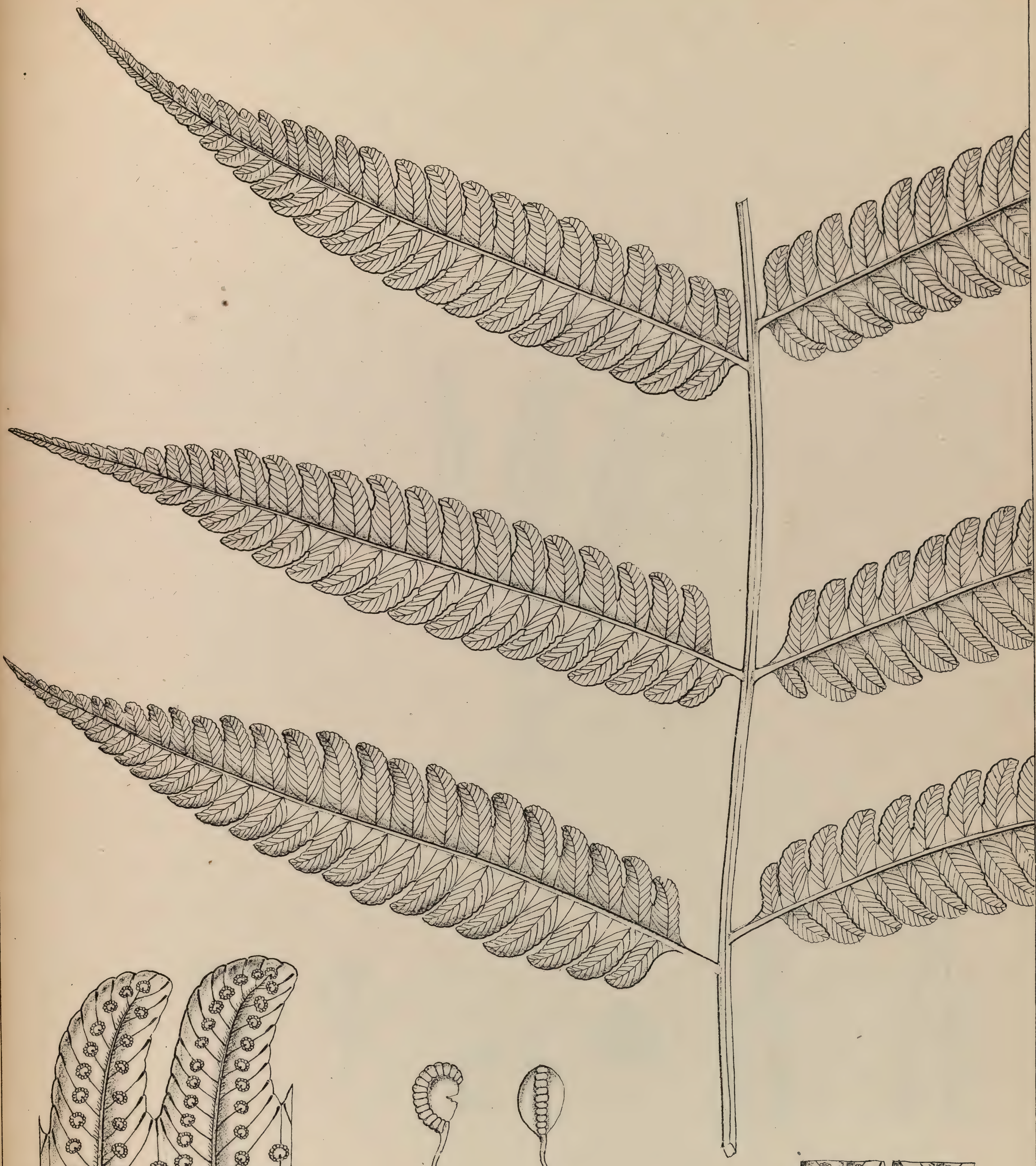

Nephrodium brachyodon.
Hook.

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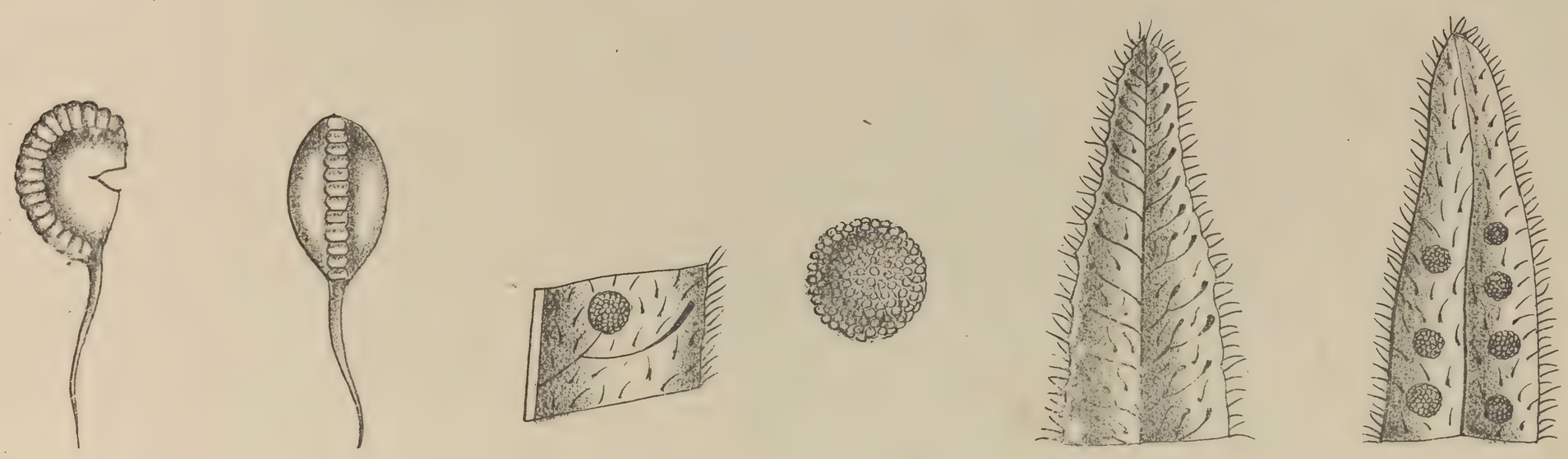

Polypodium Wallii.

Bedd.

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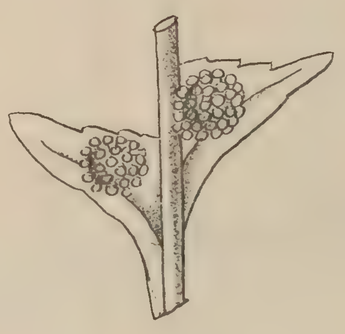

Polypodium cornigerum (Baker)

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Gonophlebium erythrocarpum.

Moett.

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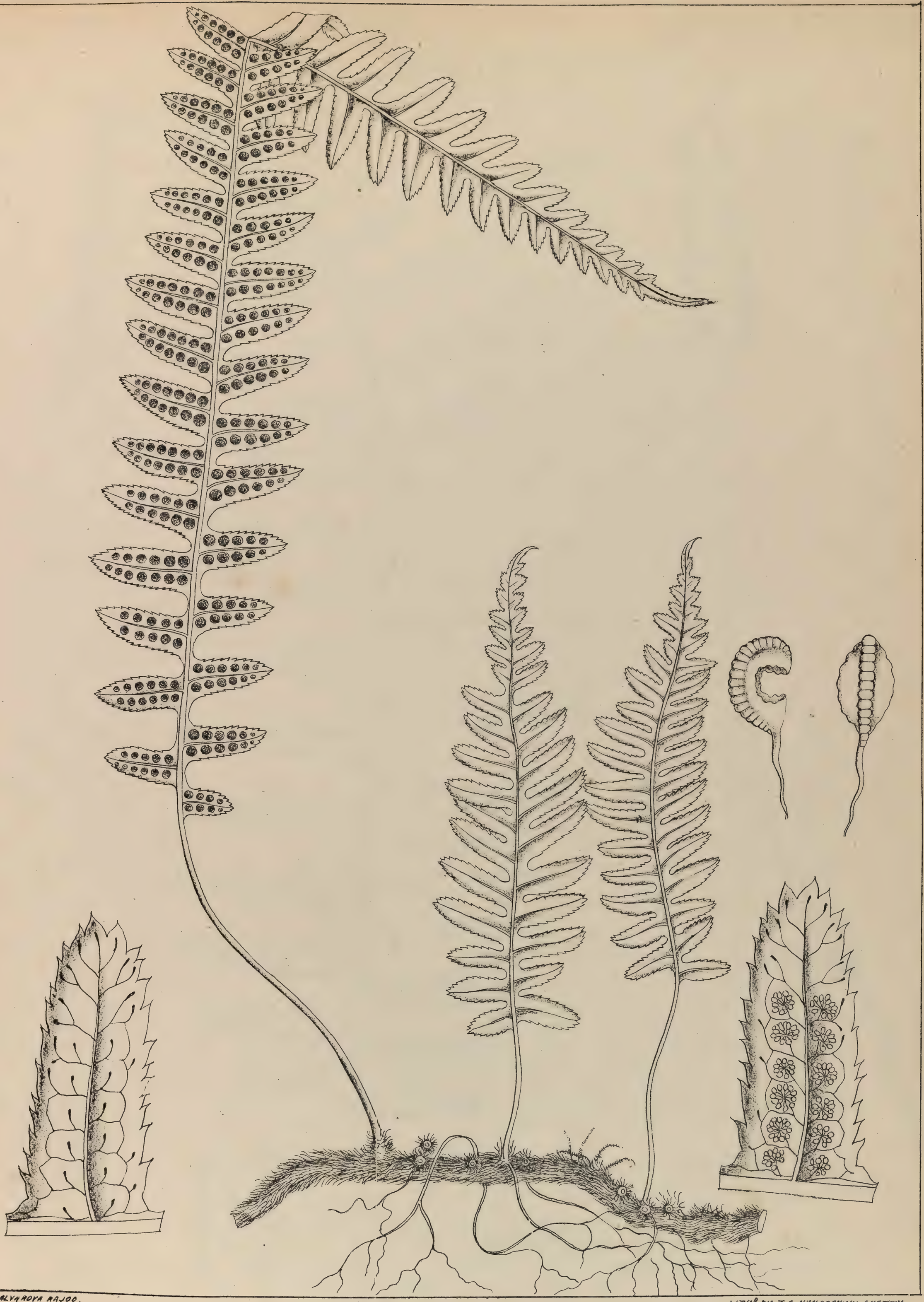

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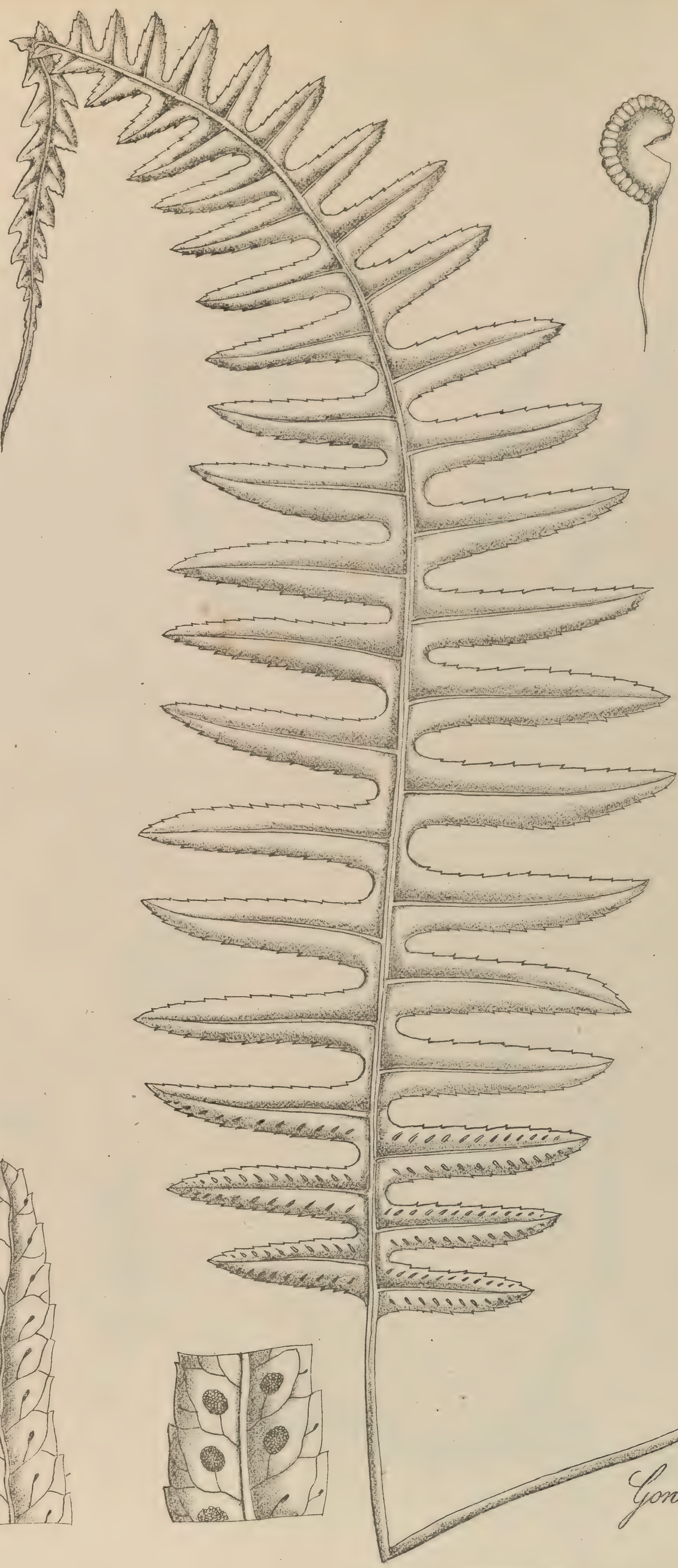
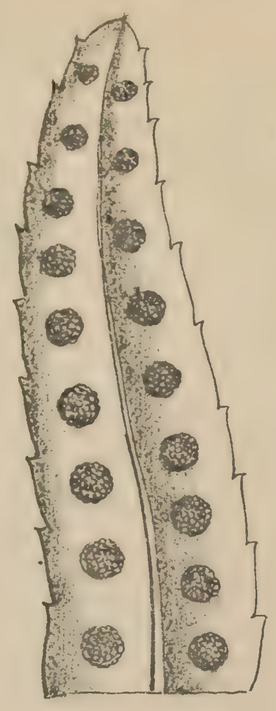
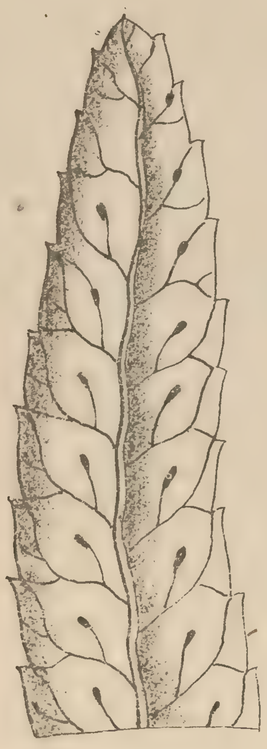
Goniophlebium Hendersoni

Atkinson.







Goniophlebium microrhizoma.

Clarke.

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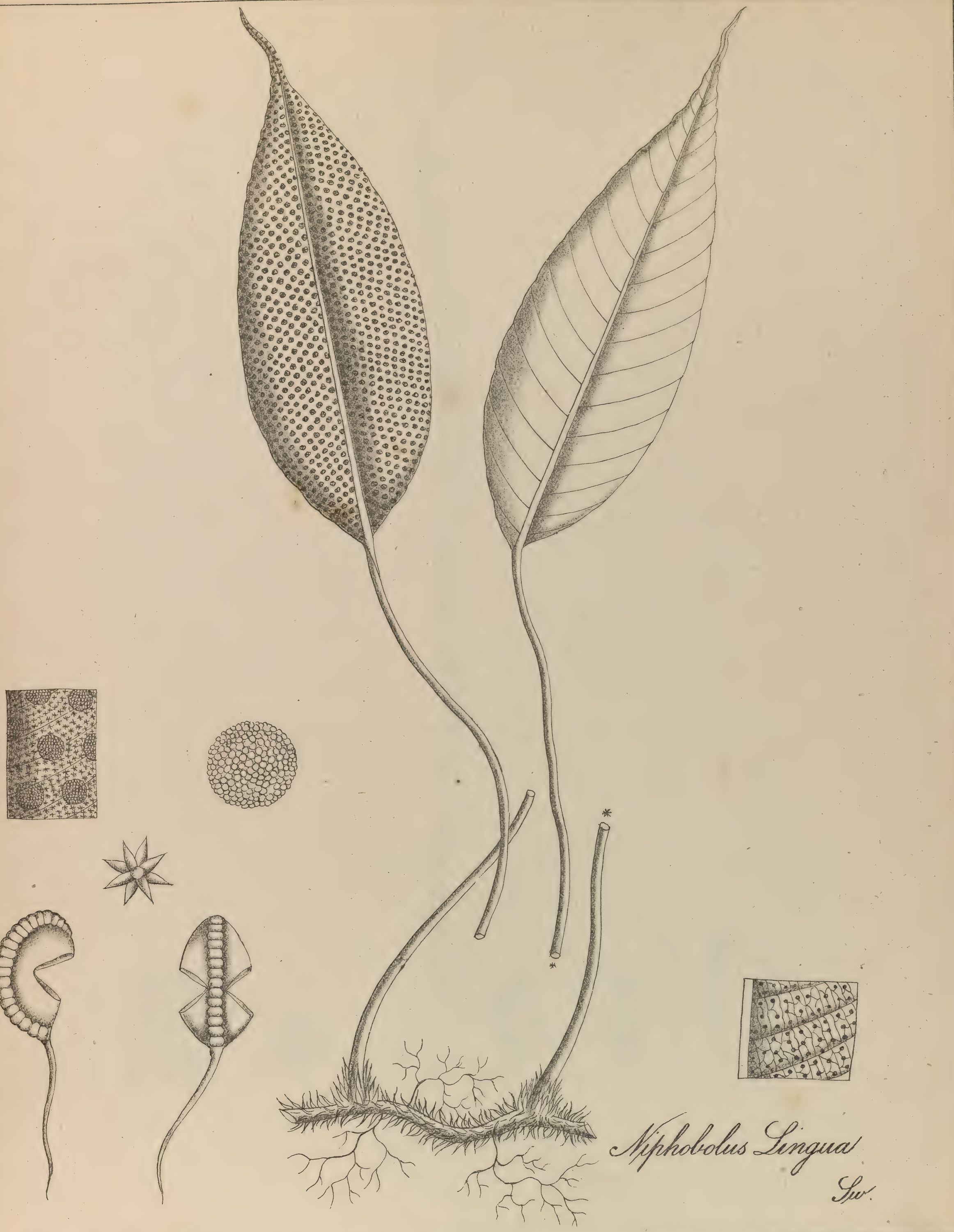

Niphobolus Lingua

Sw.

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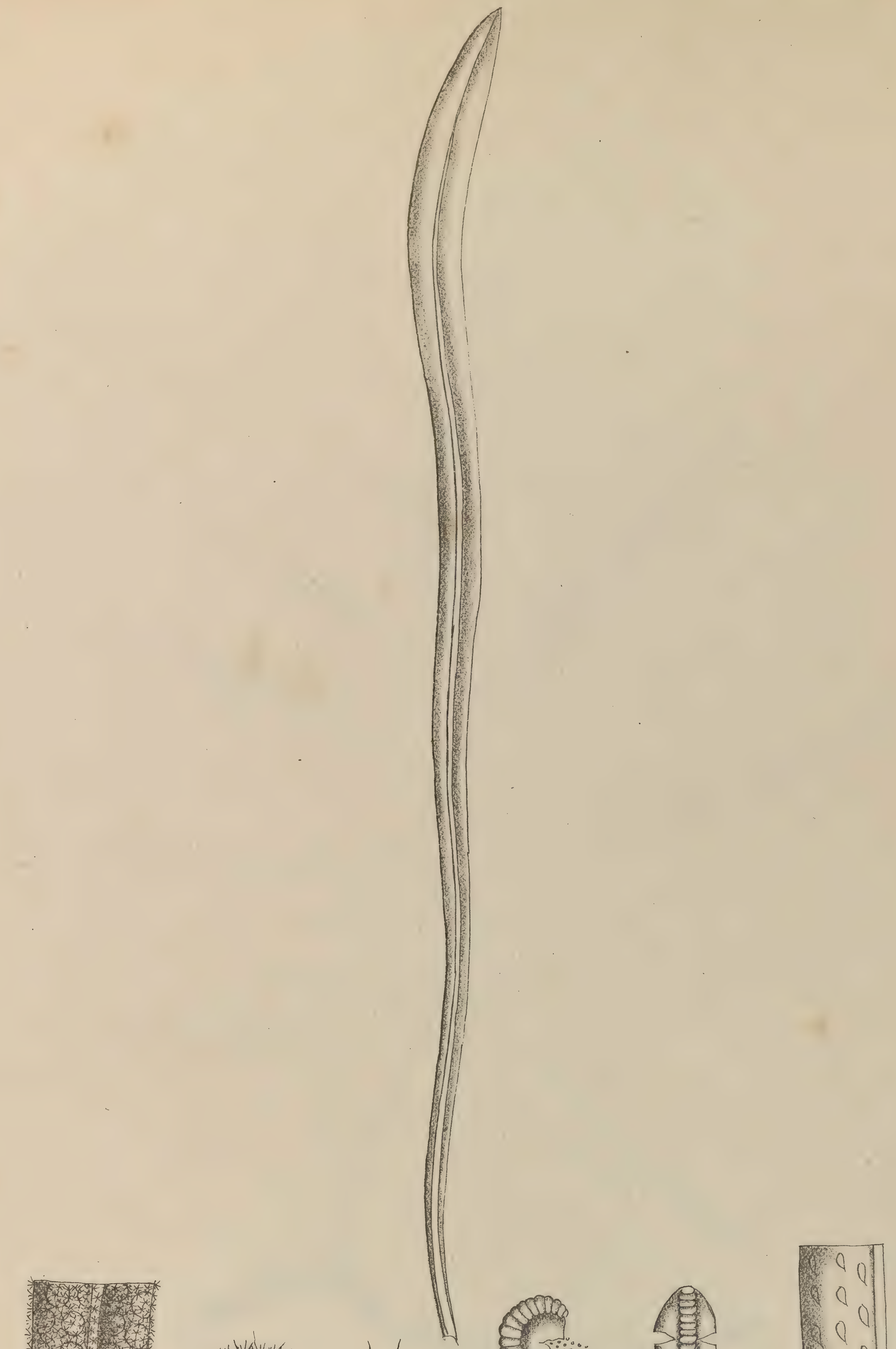

Niphobolus floccigerus.

Mett.

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Pleopeltis malacodon.

Hook.

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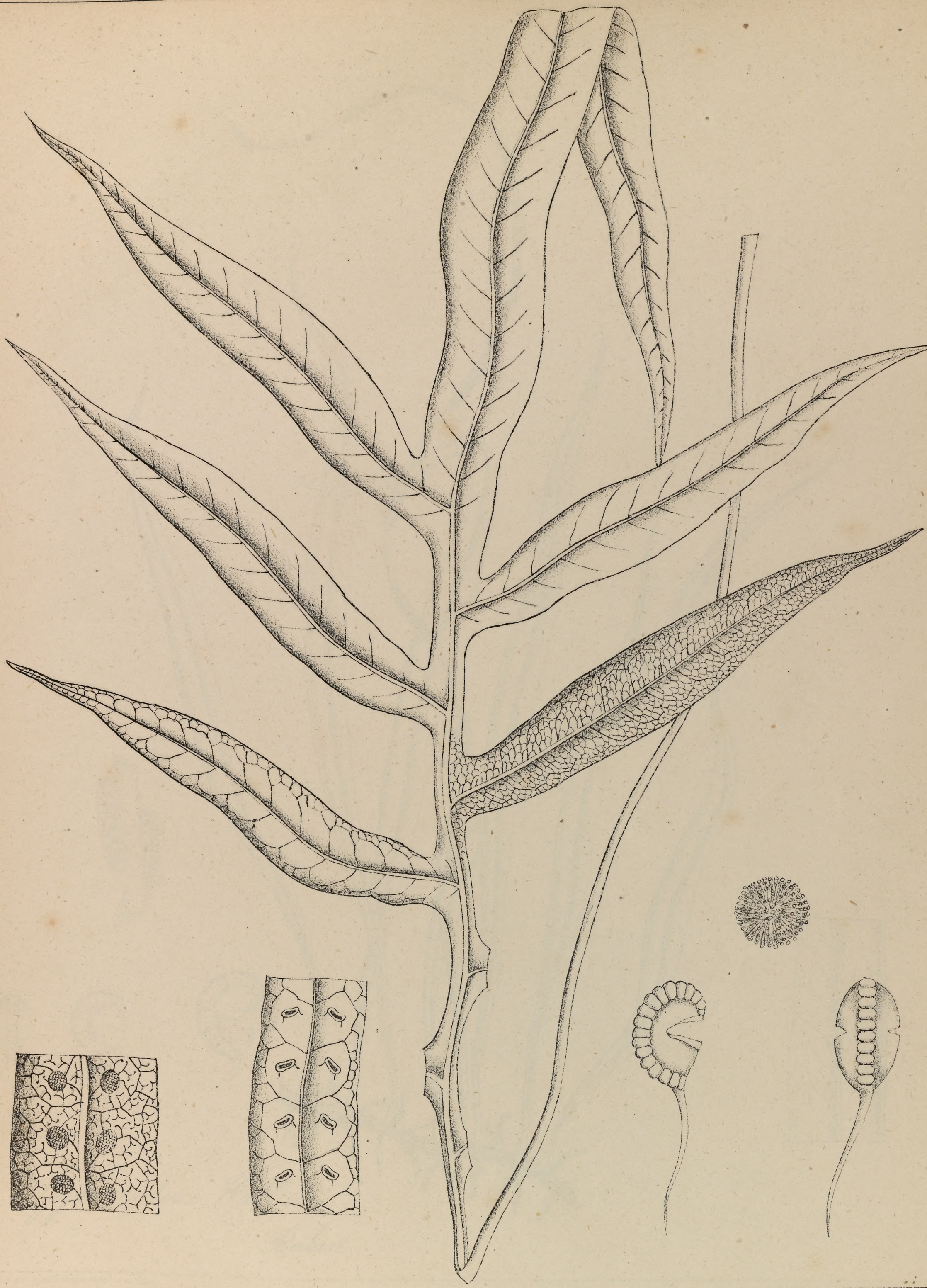

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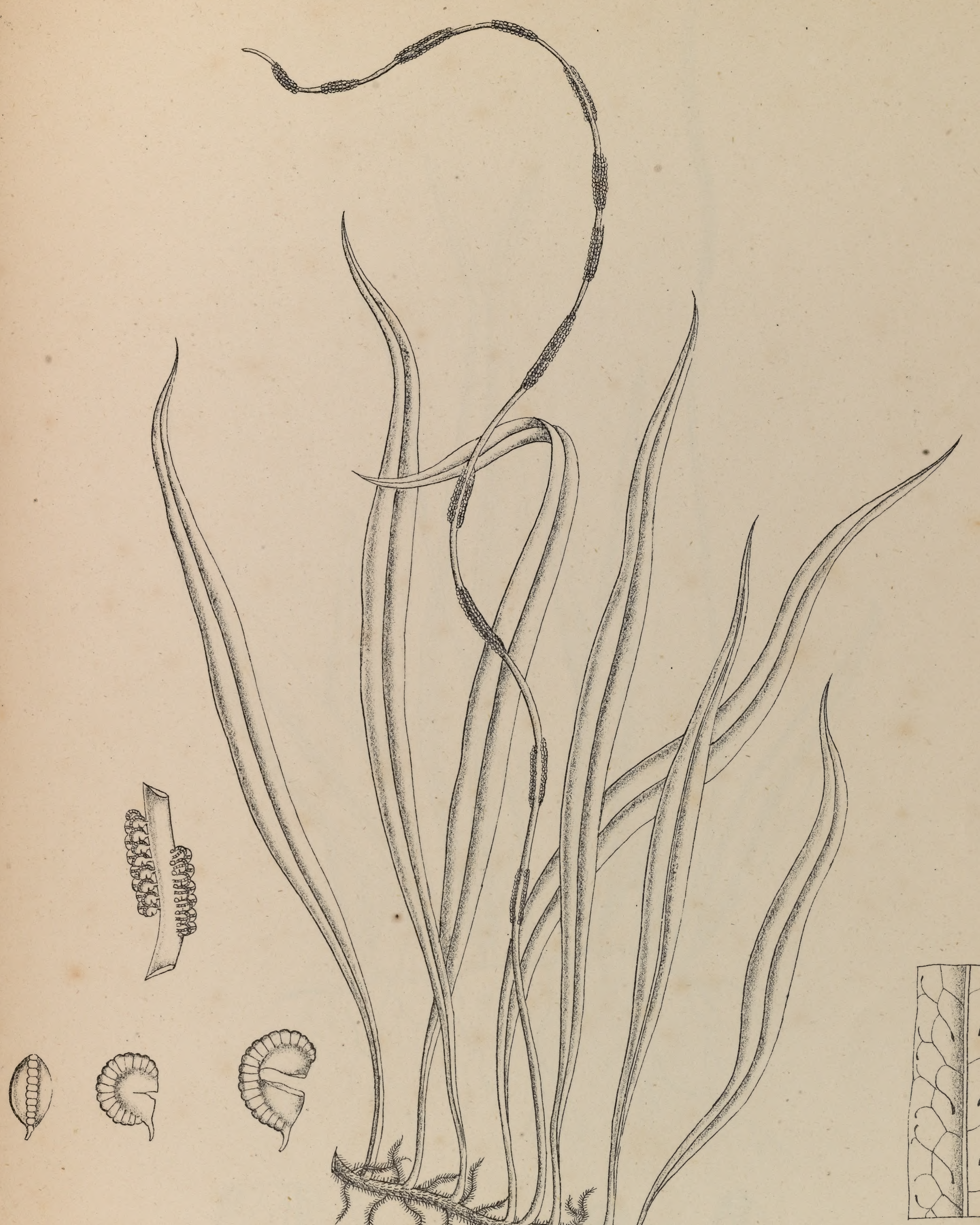
Pleopeltis longissima (Bl.)



Gymnopteris Wallii.

Baker.

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Gymnopteris metallica.

Bedd.

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